

PSYCHOLOGICAL ABSTRACTS

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GENERAL

(incl. Statistics)

2528. [Anon.] Prof. Kurt Koffka. *J. nerv. ment. Dis.*, 1942, 95, 398-399.—Obituary.—R. M. Stogdill (Ohio Bureau of Juvenile Research).

2529. [Anon.] Professor John Alexander McGeoch, 1897-1942. *Psychol. Bull.*, 1942, 39, 199.—Obituary.—F. McKinney (Missouri).

2530. Bagley, W. C. Guy Montrose Whipple. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 465-469.—Obituary and portrait.—P. S. de Q. Cabot (Simmons).

2531. Berg, L., & Brown, W. Psychology in western high schools. *Psychol. Bull.*, 1942, 39, 240-244.—This article reports the result of a questionnaire sent to schools in cities of 10,000 or more in western and midwestern states. A course in psychology is offered in more than one-fifth of these cities. It is not necessarily a new course. It is a semester, elective, credit, textbook course. It includes all traditional teaching techniques. The emphasis is on personal and social adjustments, motives, and emotions. The teacher is more often a man, a veteran of 15 years or more teaching experience, has had 4 or 5 college courses in psychology, and has rarely specialized in science. He teaches English or one of the social sciences in addition to one psychology course each semester. In 6 cases out of 7 he thinks the course has much appeal. An 11-item bibliography of psychology in secondary schools is appended.—F. McKinney (Missouri).

2532. Bruner, K. F. Of psychological writing: being some valedictory remarks on style. *J. abnorm. soc. Psychol.*, 1942, 37, 52-70.—In her capacity as editorial assistant to this journal between 1937 and 1941, the author has read and re-read with careful and critical attention every word published in its pages. From her experience, she presents several suggestions for improving the standards of psychological writing. These concern: setting the tone, planning the article as a whole, paragraphs and sentences, and pesky details. Scientific writing need not be, though it often is, dull.—C. H. Johnson (Portland, Ore.).

2533. Diehl, H. T. The protocols of science. *J. Psychol.*, 1942, 13, 165-172.—The author discusses the rôle of postulates in scientific fields, pointing out that the aims, methods, and results of following a given set of postulates may be applicable in one branch of knowledge but fail to apply in another branch.—F. A. Mote, Jr. (Connecticut).

2534. Ekstein, R. The language of psychology and of everyday life. *Psychol. Rev.*, 1942, 49, 182-

190.—Some of the idioms used to express psychological facts are derived from word-material whose literal meanings expressed physical facts related to space (e.g. chin up, bringing to mind); hence they must be taken figuratively. Failure to recognize this leads to philosophical problems, the answers to which lie outside of the realm of experimental science because they lack empirical meaning. What is required, is a reformulation of the problems in terms of meaningful concepts, which is the real function of philosophy.—A. G. Bills (Cincinnati).

2535. Flack, C. R. The incidence of William James. *Education, Lond.*, 1941, 62, 67-76.—(Educ. Abstr. VII: 321).

2536. Frank, J. D. The value of psychology as a premedical study. *J. abnorm. soc. Psychol.*, 1942, 37, 256-259.—Psychology, as a field of premedical concentration, provides the student with perhaps fewer facts directly applicable in medical school than do other subjects. On the other hand, the study of psychology gives a familiarity with general experimental methods, and with the techniques of case study, statistics, and field work, as well as some insight into the art of dealing with people. More important, certain courses in psychology "supply an organismic view of human functioning and an attitude of focussing attention on the individual rather than the general law, which stand the clinician in good stead."—F. W. Finger (Virginia).

2537. Gates, A. I. Connectionism: present concepts and interpretations. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 141-164.—The author gives arguments to establish the conviction that there is much in common between the basic concepts of connectionism as developed by Thorndike and Woodworth and certain organismic views. "The differences between most of these systems of psychology have been exaggerated beyond all reason."—P. S. de Q. Cabot (Simmons).

2538. Gerard, R. W. Higher levels of integration. *Science*, 1942, 95, 309-313.—The author considers the development of the transmission system within single organisms and its rôle in organic integration, as well as the problem of part and whole in single biological units, more complex aggregates, and man and society. His general conclusion is that "mankind as a whole will become an integrated cooperative unit; and the ultimate future of human society, . . . appears in the eyes of the biologist, . . . as bright with hope."—F. A. Mote, Jr. (Connecticut).

2539. Hall, E. W. Some dangers in the use of symbolic logic in psychology. *Psychol. Rev.*, 1942, 49, 142-169.—The present high opinion of the value of symbolic logic among theoretical psychologists will die unless the limitations in its use are recog-

nized. The movement to reform psychological methodology by emphasizing postulational techniques and operational definitions promises to achieve certain values. But to each a danger is linked. If it brings greater clarity in terminology, it also threatens to bring a pseudo-clarity by use of non-linguistic symbols, and a sacrifice of comprehensibility. The supposed value of increasing agreement between psychologists has failed to remove disagreements among those adopting the symbolic techniques. By increasing deductive rigor and strengthening theory as against data accumulation, we may discourage needed criticism and subordinate the phenomena to the logical system. The value gained through symbolic logic in excising metaphysical entities may bring 'theoretical asceticism' and a resulting sterility of concepts. The hope for augmented explanatory fruitfulness overlooks the recognized fact that derivation is tautological, involving mere renaming, or else tacitly implying explanatory entities. Finally, the value gained through "elimination of the role of qualitative intuition, as promised by correlationism and operationism, is accompanied by the danger of obliteration of intensional differences."—A. G. Bills (Cincinnati).

2540. Hartkemeir, H. P. *Principles of punch-card machine operation; how to operate punch-card tabulating and alphabetic accounting machines*. New York: Crowell, 1942. Pp. xiv + 269. \$3.25.—In this loose-leaf manual are presented the basic techniques for use of punched cards in statistical work. Descriptions of the sorter and the various features of numerical and alphabetical tabulators are included. Controlling, splitting counters, balancing, class selection, counter coupling, digit selection, and many other devices applicable to analysis of educational and psychological data are thoroughly explained. A section is devoted to the use of the tabulator in finding the sums of squares and cross-products essential for the intercorrelation of variables. The book likewise provides numerous illustrations of report sheets, wiring set-ups, and diagrams of machine mechanisms.—L. S. Kogan (Rochester).

2541. Köhler, W. Kurt Koffka, 1886-1941. *Psychol. Rev.*, 1942, 49, 97-101.—Koffka, with Wertheimer and Köhler, started the Gestalt movement in continuation of the revolt against Wundtian psychology started by the Würzburg school. His three major reforms were: (1) to replace an atomistic interpretation of human experience with one in which the primary data are structures or Gestalten, (2) to correlate stimuli with these perceptual structures rather than with sensations, (3) to relate brain function to specific molar events rather than to make brain processes aggregates of elementary local excitations. His early work was confined to the field of perception because he felt that the clearest decisions could be obtained here. But in his *Growth of the mind* and his *Principles of Gestalt psychology* he attempted a unification of the entire science. Portrait.—A. G. Bills (Cincinnati).

2542. Kornilov, K. N., Teplov, B. M., & Schwartz, L. M. [Eds.] *Psychology*. Moscow, 1938. Pp. 328. R. 5.75.—22 Moscow psychologists participated in the preparation of this textbook. Psychology is defined as the science of mental life in its objective and subjective manifestations. Intelligence, motivation, and development have not been included in the text because they presented too many controversial and unsettled aspects. The 16 chapters are: subject matter, methods, physiological foundations, sensations, perceptions, attention, imagery, memory, habits, imagination, thinking, speech, emotions, will, temperament, character. Intelligence testing and quantitative psychometrics in general are severely criticized as conducive to fatalistic reactionary viewpoints. Qualitative approaches and typology are preferred, particularly when global, rather than segmental action is under consideration. Gestalt psychology is stated to be farther from reality and more idealistic than even its Wundtian predecessors. Behaviorism, the originator of which is said to be Thorndike, is too mechanistic and incapable of solving the problem of complex and conscious action so that it too, must eventually become idealistic. Psychoanalysis is not even mentioned. The book is reminiscent of American functionalism.—G. H. S. Razran (Queens).

2543. Kostiuk, G. S., Chattan, P. R., & Gordon, L. A. *Psychology; a textbook for students*. Kiev, 1939. Pp. 576. R. 15.—Psychology is defined as the science of mental life. Mental life is in its turn defined as the ability of living matter to reflect objective reality and to manifest an active relation (attitude) towards it. The 20 chapters of the book are named: subject matter of psychology, historical development, methods, anatomical and physiological bases of mental life, development in animals, development of human consciousness, conditions and stages of child development, personality and its manifestations, sensations, perceptions, memory, imagination, thinking, speech, feelings, attention, will, needs and interests, ability, character and temperament.—G. H. S. Razran (Queens).

2544. Kroh, O. Prof. Dr. Bruno Petermann. *Z. Psychol.*, 1941, 150, i-iii.—Obituary and portrait.—H. L. Ansbacher (Brown).

2545. Marbe, K. *Das Ausgleichsprinzip in der Statistik und verwandte Probleme*. (The principle of equalization in statistics and related problems.) Munich: Beck, 1938. Pp. 164.—[Abstracted review; original not seen.] For nearly a decade the author has been concerned with the constancy of relative frequencies of various phenomena, such as coin tossing and roulette spins. Birth statistics show variation in relative frequency as to sex. The theory is advanced that a constant relative frequency is the result not only of constant conditions (e.g. for the fall of a tossed coin), but also of the equalizing or cancelling effect of opposed variable conditions (subjective influence in tossing coins, movements of the croupier, etc.). The direction of change of sex ratios at birth can be predicted, and in this variable situation numerous biological factors

apparently influence the ratio.—*H. D. Spoerl* (American International College).

2546. McDougall, W. *Livets gåta; en överblick över olika teorier.* (The riddle of life; a survey of theories.) Stockholm: Natur och Kultur, 1941. Pp. 252. Kr. 6.—See XV: 30.—*H. L. Ansbacher* (Brown).

2547. McNemar, Q., & Merrill, M. A. [Eds.] *Studies in personality; contributed in honor of Lewis M. Terman.* New York: McGraw-Hill, 1942. Pp. x + 333. \$3.50.—These studies are contributed by some of Terman's former graduate students. Terman's academic and scientific development are reviewed in an introduction by R. S. Woodworth. An annotated bibliography of Terman's writings has been prepared by G. A. Magaret and C. Wright. For contributions to this volume see XVI: 2556, 2610, 2627, 2639, 2642, 2656, 2667, 2669, 2727, 2732, 2734, 2742, 2761, 2789, 2791, 2912.—*G. S. Speer* (Central YMCA College).

2548. Muller, H. J. On judging the significance of a difference obtained by averaging essentially different series. *Amer. Nat.*, 1941, 75, 264-271.—Formulae are developed to determine to what extent a given set of data indicates that a difference in two experimental conditions influences the frequency of events of a given type under the two conditions. It is assumed that the events "have been obtained in the form of a number of series which may differ determinately from one another, and that each series consists of two lots, representing the contrasting conditions A and B, while the total numbers observed vary regularly from series to series as well as from lot to lot."—*N. R. Bartlett* (Brown).

2549. Nicol, E. *Psicología de las situaciones vitales.* (Psychology of life situations.) Mexico: Colegio de México, 1941. Pp. xxv + 211.—Because it best characterizes the personal present, the "life situation" is the suitable framework in which to investigate psychological events and relationships. Life situations are of two basic kinds: fundamental (the level of the human organism) and limited (individualized). They are constituted by space-time arrangements, and are subject to environmental and cultural determination. They represent the choices and destiny of the person as occurring in his behavior and outlook, and are manifested on the level of characterological indices. The concept is a development of Bergson's approach to concrete experiences.—*H. D. Spoerl* (American International College).

2550. Plantinga, C. A. The necessity of the hypothesis of localized cerebral dissociation in hormic psychology. *Character & Pers.*, 1941, 10, 129-139.—McDougall and Lundholm agree in their dualistic presuppositions and in their insistence on the theoretical and practical need for a conational doctrine and on the reality of the processes of dissociation and repression in abnormal psychology. They differ, in that Lundholm attempts to secure a more consistent and logical hormic system through the elimination of certain nonhormic elements.

Their differences are discussed particularly as found in interpretations of hysterias, McDougall insisting on a hypothesis of localized cerebral dissociation and Lundholm explaining them purely on a conational basis. Each should give ground and recognize the fact that some hysterias may involve neural dissociations and that others may not; arguments and briefly stated examples are given to support this contention.—*M. O. Wilson* (Oklahoma).

2551. Ponzo, M. Friedrich Kiesow. *Arch. ges. Psychol.*, 1941, 108, v-vi.—Obituary.—*H. D. Spoerl* (American International College).

2552. Raushenbush, E. [Ed.] *Psychology for individual education.* New York: Columbia University Press, 1942. Pp. 318. \$2.75.—In 1935 Sarah Lawrence College established exploratory courses for freshmen with the idea of giving the student an opportunity to satisfy her individual needs and interests. The present book consists of 4 studies by 4 teachers engaged in exploratory work in psychology. The aims of the exploratory course in psychology and the way psychological topics and materials are handled in such a course are presented in a chapter by L. B. Murphy. E. Lerner and J. Judge give a running account of their own courses, while M. Grant shows how many questions raised in the psychology classroom can be dealt with in the biology laboratory.—*L. Long* (City College, New York).

2553. Rocha, O. [The difficult progress of the sciences and especially of psychology.] *An. Assist. Psicopat.*, 1941.

2554. Rubinstein, S. L. [Fundamentals of general psychology.] Moscow, 1940. Pp. 596. R. 15.—This is a textbook by the head of the Hertzen Pedagogical Institute. Psychology is defined as the science of mental life in developmental action, and the conscious concrete act is taken as its basic unit. A conscious act is not just an act accompanied by consciousness but one that is ontologically different from a mere reaction. The 21 chapters deal with: the subject matter of the field; psychological methods; the history of psychology; phylogenetics, ontogenetic, and cultural development; mental functions in action; sensations and perceptions; memory; imagination; thinking; speech; attention; emotional and voluntary processes; action; activities; character; temperament; personality; and ability. The book is exceptionally well documented and followed by an extensive bibliography with a great many American titles. Both Thorndike and Watson are mentioned more often than Stalin but considerably less often than Marx and Lenin. The testing method is criticized as a static, reactionary approach.—*G. H. S. Razran* (Queens).

2555. Sargent, S. S. How shall we study individual differences? *Psychol. Rev.*, 1942, 49, 170-182.—Quantitative approaches to the study of individual differences do not give a complete picture because they neglect to describe (1) the methods of work used by the individual being tested, (2) his pattern of behavioral processes, and (3) important

aspects of his personality. An example of the first is the demonstrated superiority of the verbal over the visual method of maze learning. The second is illustrated by the difference in process between the solution of easy and difficult items of identical material. The answer to the third lies in non-quantitative methods, such as subjective reports, psychoanalysis, and projective techniques, and a consideration of such variables as attention, set, motivation, and attitude. The differential psychologist should be willing to employ a synthesis of different techniques.—*A. G. Bills* (Cincinnati).

2556. Shen, E. The place of individual differences in experimentation. In *McNemar, Q., & Merrill, M. A. Studies in personality*. New York: McGraw-Hill, 1942. Pp. 259-269.—The author describes methods and formulae for the treatment of experimentally derived data, to permit evaluation of the influence of subject differences and of their interaction with experimental treatment, in addition to the usual effects of experimental treatment.—*G. S. Speer* (Central YMCA College).

2557. Smith, F. V. An interpretation of the theory of Gestalt. *Aust. J. Psychol. Phil.*, 1941, 19, 193-215.—The concept of Gestalt depends fundamentally upon the exercise of influence among parts of the totality. The specialized auxiliary concepts are interrelated by the logic of this theory of interactions. The significance of the Gestalt theory lies in the implications of causality. The matrix view of causal explanation is illustrated and justified by the findings of a variety of physiological and psychological studies, which the author reviews.—*H. D. Spoerl* (American International College).

2558. Spoerl, H. D. Abnormal and social psychology in the life and work of William James. *J. abnorm. soc. Psychol.*, 1942, 37, 3-19.—James' formal and academic participation in abnormal psychology was more significant than its extensiveness might suggest. He asserted that the exceptional interprets the usual, and that the abnormal may be the misunderstood or the unappreciated. James was often absorbed in practical social interest, and his general psychological theory was suited to the explanation of social phenomena. He was specifically concerned with imperialism, jingoism, militarism, lynching, morale, education, and mental hygiene. In his writings egocentric and withdrawing tendencies coexist. His personal life was a record of continual struggle between his idealism in the vulgar sense of the word and the constraining menace of philosophical idealism by which his thinking refused to be shackled. His devotion to an interpretation of individuality restricted his possible contribution to abnormal and social psychology.—*C. H. Johnson* (Portland, Ore.).

2559. Taylor, W. S. Partialling out sums of squares and products in calculating correlations with non-homogeneous data. *Brit. J. Psychol.*, 1942, 32, 318-323.—In analyzing psychological data it has been the normal practice to calculate correlations without attempting to partial out sums

of squares and sums of products of deviations from the mean. Unless there is independent evidence that the population tested is homogeneous, the values obtained may be misleading. Where the population tested is not homogeneous, the differences between the mean values of the various groups may be significant. In order to obtain a true value for the correlation between the scores of the individuals composing the groups it is necessary to partial out the sums of squares and the sums of products of deviations from the mean, using only those attributable to the deviations 'within groups,' i.e. to the deviations of the observations about their group means.—*M. D. Vernon* (Cambridge).

2560. Winter, J. E. An inexpensive, noiseless memory apparatus. *J. exp. Psychol.*, 1942, 30, 345-346.—Specifications are given for assembling an exposure device for memory materials at a cost of less than \$5.00. An empty paint can, the drum of the apparatus, bears a hardwood sprocket-wheel which engages with a cog wheel so as to be capable of being rotated around its longitudinal axis by means of the pull of a small electric motor such as is used in electric signs or in the cheapest telechron clocks. The aperture of the device has an adjustable slide to provide both for single and for multiple presentation lists.—*M. J. Zigler* (Wellesley).

[See also abstracts 2636, 2754.]

NERVOUS SYSTEM

2561. Ades, H. W., & Felder, R. The acoustic area of the monkey (*Macaca Mulatta*). *J. Neurophysiol.*, 1942, 5, 49-54.—The portion of the superior temporal gyrus of the monkey responsive to click stimulation was mapped by means of the electrical response under nembutal anesthesia. The region between the posterior and medial borders of the superior surface of the superior temporal gyrus was found to be the sharply demarcated responsive area. The electrically responsive area to click stimulation does not extend to the lateral surface of the gyrus where Poliak found acoustic projections.—*D. B. Lindsley* (Brown).

2562. Arvanitaki, A. Effects evoked in an axon by the activity of a contiguous one. *J. Neurophysiol.*, 1942, 5, 89-108.—Interaction between two isolated giant axons of the cuttlefish (*Sepia officinalis*) is demonstrated when they are put in contact and one of them is stimulated. The current from the action potential of the active or stimulated axon serves as a stimulus to the other axon in contact with it. The active axon is called a pre-ephaptic axon; the resting or secondary axon, a postephaptic axon; the region of junction between the two axons, an ephapse (action of touching). The latency of transmission from pre-ephaptic to post-ephaptic axon is 2 to 5 msec. Ephaptic phenomena are discussed in relation to synaptic phenomena and to interaction among central nervous elements.—*D. B. Lindsley* (Brown).

2563. Bernhard, C. G., Granit, R., & Skoglund, C. R. The breakdown of accommodation—nerve as

model sense-organ. *J. Neurophysiol.*, 1942, 5, 55-68.—Microelectrodes inserted in muscle provided a means of recording motor unit responses which served as an index of constant response to stimulus currents of varying time constant (rising phase) applied to the nerve. Multiples of rheobase were plotted against rising phase of the stimulating current to provide "accommodation curves." Breakdown of accommodation is defined in terms of the change of slope of the accommodation curves based upon the properties of spike potentials from the muscle. Both anodal and cathodal polarization caused by the slowly rising stimulating currents are shown to be capable of inhibiting spontaneous discharges in nerve. The results are discussed in terms of the nerve as a model sense-organ assuming that a slow "generator potential" in sensory end organs is responsible for repetitive firing of the axon. The model is also applied to retinal and optic ganglion mechanisms of *Dysticus* to explain excitation and inhibition.—*D. B. Lindsley* (Brown).

2564. Dow, R. S. Cerebellar action potentials in response to stimulation of the cerebral cortex in monkeys and cats. *J. Neurophysiol.*, 1942, 5, 121-136.—Electrical stimulation of the cerebral cortex in cats and monkeys produced predominantly contralateral responses in various regions of the cerebellum. The most widespread cerebellar potentials were produced in the monkey by stimulation of the postcentral gyrus and areas 4 and 6 of the precentral region, although stimulation of areas 8, 9, and 10 of the frontal lobe, 7 of the parietal, 18 and 19 of the occipital, and 21 and 22 of the temporal lobes also produced responses. Differences in magnitude of certain of the cerebellar responses could be correlated with topographical subdivisions of the cortex.—*D. B. Lindsley* (Brown).

2565. Finley, K. H., & Lesko, J. H. EEG studies of nine cases with major psychoses receiving metrazol. *Amer. J. Psychiat.*, 1941, 98, 185-191.—Temporary changes in the brain potentials may occur in cases receiving in the neighborhood of 10 injections, and changes of a permanent character may be expected in those cases receiving 20 or more injections.—*R. Goldman* (Boston Psychopathic Hospital).

2566. Gibbs, F. A. Cortical frequency spectra of healthy adults. *J. nerv. ment. Dis.*, 1942, 95, 417-426.—The electrical activity of the frontal, parietal, occipital, and temporal cortex of both hemispheres was studied in 20 healthy adults by analyzing electroencephalograms with the Grass method of spectrum analysis. There tends to be a decreasing amount of energy in the 1 to 3 per second range proceeding through the spectra in the order of frontal, temporal, parietal, and occipital, with the exception of the left temporal which tends to have less energy than either parietal. No clear gradient is evident for the frequencies between 5 and 8 per second. There tends to be an increasing amount of energy in the 9 to 12 per second range proceeding through the spectra in the order of frontal, temporal, parietal,

and occipital. From 13 to 24 per second a gradient from temporal and frontal to parietal and occipital is discernible. Although certain cortical fields tend to beat with a particular frequency, a very similar rhythmic activity is common to the whole cortex, and any area can beat with the same rhythm as any other area.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2567. Graham, H. T. The effects of polarization on nerve action potentials. *J. Neurophysiol.*, 1942, 5, 137-152.—The effect of anodal and cathodal polarization of A and C fibers of frog and cat nerves on the components of the nerve action potential are described.—*D. B. Lindsley* (Brown).

2568. Gutiérrez-Noriega, C. Los movimientos de locomoción en el gato descerebrado. (Locomotor movements in the decerebrate cat.) *Rev. Neuro-Psiquiat.*, Lima, 1941, 4, 333-356.—6 groups of decerebrate cats were prepared by sectioning the brain stem at various regions from the pons to the thalamus. On recovery, doses of coramine were administered, producing gradations of locomotor movements. No such reactions were obtained from the "bulbar" cats, while thalamic cats were capable of locomotion. Thus, the intermediate groups were studied more closely. Tables and curves are presented showing the degrees of response. The coramine method (cardiazol was used at first) is superior to that of electrical stimulation or of compression, since response patterns may be more closely observed. It is concluded that several integrated local centers are needed to produce integrated responses. Extirpation of the cerebellum did not substantially alter the results.—*H. D. Spoerl* (American International College).

2569. Krieg, W. J. S. Functional neuroanatomy. Philadelphia: Blakiston, 1942. Pp. xx + 553. \$6.50.—This textbook is organized along systemic, rather than regional lines. A summary of methods of observing the central nervous system and tracing its development is followed by a description of the sensory and motor neurons. The primary neurons of the cranial nerves are grouped according to their functional components within the brain stem. A detailed consideration of each of the sensory and motor systems leads up to a description of connections to and within the cerebrum. Related non-neuronal inclusions with the nervous system, the cerebellum, and finally the autonomic system are presented. There are a laboratory guide (29 pp.), an atlas of sections (70 pp.), and suggestions for further study. The work is illustrated with 274 drawings by the author.—*L. A. Riggs* (Brown).

2570. Lennox, W. G., Gibbs, E. L., & Gibbs, F. A. Twins, brain waves and epilepsy. *J. nerv. ment. Dis.*, 1942, 95, 353-359.—Abstract and discussion.

2571. Lloyd, D. P. C. Stimulation of peripheral nerve terminations by active muscle. *J. Neurophysiol.*, 1942, 5, 153-165.—Stimulation of a motor nerve (ventral root) producing muscle contraction causes a secondary centripetal discharge in the ventral root with a latency equal to conduction

time from stimulating electrodes to muscle, neuromuscular delay, utilization time, and conduction time from muscle to recording electrodes on ventral roots. The secondary centripetal discharges are initiated by muscle processes coincident with the rising phase of the muscle action potential and reflect faithfully the stages of neuromuscular transmission and muscle action.—D. B. Lindsley (Brown).

2572. Marmor, J., & Savitsky, N. **Electroencephalography in cases of head injury.** *J. nerv. ment. Dis.*, 1942, 95, 285-298.—28 patients with various types of head injury were studied. The EEG's of 8 of 11 cases diagnosed as post-concussion syndrome showed abnormal waves, most consistently characterized by occasional short bursts of 6-8 per second rhythms occurring diffusely in all leads. In all of 5 patients with traumatic epilepsy abnormal records were obtained with poor alpha activity and occasional bursts of slow high amplitude potentials. No abnormal waves were found in 4 cases diagnosed as hysteria.—R. M. Stogdill (Ohio Bureau of Juvenile Research).

2573. Nachmansohn, D., & Steinbach, H. B. **Localization of enzymes in nerves. I. Succinic dehydrogenase and vitamin B₁.** *J. Neurophysiol.*, 1942, 5, 109-120.—About 90% of the succinic dehydrogenase of the giant axon of the squid is found in the axoplasm, a contrast to the distribution of choline esterase which is located near the surface and thought therefore to be associated with electrical changes connected with nerve conduction. The concentration of vitamin B₁ differs from either of the above, being located principally in the nerve sheath. Its concentration there is thought to be associated with oxidation of pyruvic acid and the formation of acetylcholine, an assumption which may explain the sensitivity of the nervous system to vitamin B₁ deficiency.—D. B. Lindsley (Brown).

2574. Pitts, R. F. **Excitation and inhibition of phrenic motor neurones.** *J. Neurophysiol.*, 1942, 5, 75-88.—Electrical responses from single fibers of the phrenic nerve were recorded during stimulation of inspiratory and expiratory centers in the medulla. Stimulation of the inspiratory center with low intensity and low frequency electrical currents has the same effect as normal chemical activation of the respiratory center; there is increased frequency of the phrenic neurone discharge, there is recruitment of inactive neurones, and the duration of the discharge is increased. Stimulation of the expiratory center decreases the frequency and duration of the discharge and reduces ("decrutement") the number of active neurones. The inhibitory and excitatory relationships of the two centers and their effects on phrenic motor neurone activity are discussed.—D. B. Lindsley (Brown).

2575. Sjöqvist, O., & Weinstein, E. A. **The effect of section of the medial lemniscus on proprioceptive functions in chimpanzees and monkeys.** *J. Neurophysiol.*, 1942, 5, 69-74.—Section of the medial lemniscus alone produced loss of proprioceptive ability in animals trained to discriminate weights,

but the loss was not a permanent one. Section of the superior cerebellar peduncle (dentato-rubrothalamic tract) alone produced no change in weight discrimination ability. Proprioceptive function and weight discrimination ability were permanently affected by section of both pathways. This evidence, together with that from other studies, suggests that proprioceptive pathways via cerebellum may after a time replace proprioceptive functions lost by section of the medial lemniscus. Discussion of postcentral and precentral cortical representation of proprioceptive function is presented in the light of this observation.—D. B. Lindsley (Brown).

[See also abstracts 2538, 2634, 2638, 2691, 2834, 2913.]

RECEPTIVE AND PERCEPTUAL PROCESSES

2576. Appel, H. **[The adaptability of different color charts in serial examinations.]** *Klin. Mbl. Augenheilk.*, 1941, 106, 452-454.—[Abstracted review; original not seen.] The Ishihara charts were found to be more reliable than the Stilling or Podesta charts, but they are easily memorized.—D. J. Shaad (Lawrence, Kansas).

2577. Bab, W. **Psychologic problems in ophthalmology.** *Amer. J. Ophthal.*, 1942, 25, 321-330.—Organic eye disturbances must be carefully diagnosed and distinguished from disturbances of psychogenic origin; case histories are presented.—D. J. Shaad (Lawrence, Kansas).

2578. Betts, E. A. **A study of paper as a factor in type visibility.** *Optom. Wkly.*, 1942, 33, 229-233.—In this study comparing papers used for standard basal readers with the cream tinted paper developed under the trade name of Facilex, the latter produced substantially better visibility. Bibliography.—D. J. Shaad (Lawrence, Kansas).

2579. Bobbitt, J. M. **An experimental study of the phenomenon of closure as a threshold function.** *J. exp. Psychol.*, 1942, 30, 273-294.—Triangular forms were drawn in different degrees of completeness of contour (percentage of perimeter of the figure) and presented by means of the Dodge mirror tachistoscope. Thresholds for closure, i.e. the point in the series representing progressive degrees of completeness at which the transition from duality to unity occurred, were determined in serial presentations made by the method of minimal changes. Determinations were made for 3 series of stimuli: equilateral triangles, and isosceles triangles in two sizes. Threshold values submitted are means of 20 measurements, including standard deviations. Both the nature of the angular characteristics and the size of the figure influence the location of the threshold in the stimulus-series. Coefficients of intercorrelation, computed by the method of rank differences, ranged between .82 and .91.—M. J. Zigler (Wellesley).

2580. Boring, E. G. **Sensation and perception in the history of experimental psychology.** New York: Appleton-Century, 1942. Pp. xv + 644. \$5.00.—

This book is a sequel to *A history of experimental psychology* (see IV: 456). It brings the history of the senses up to about 1930. The author does not trust his own perspective for events of the last decade. The first 2 chapters are introductory and consider general problems. The next 6 cover vision, including depth perception. 3 chapters are devoted to audition, and 1 each is given to smell and taste, touch, organic sensibility, and the perception of time and movement. A final chapter analyzes some of the factors that have inhibited and facilitated scientific progress. There is an index of names and one of subjects. References and comments follow each chapter and constitute a substantial portion of the book.—H. Schlosberg (Brown).

2581. Ehler, H. Weitere Untersuchungen zum Weber-Fechnerschen Gesetz bei Darbietung zweier farbiger Lichtreize. (Further investigations of the Weber-Fechner law in presentation of two colored light stimuli.) *Arch. ges. Psychol.*, 1941, **108**, 211-266.—The essential procedure of R. Ehler's study with stimuli of neighboring wave-lengths (see XIII: 3984) was used, but this time complementary colors were also employed. The results are in conformity with those of the previous study; the behavior of the component curves in relation to the combination is discussed in terms of photoreceptive theory (Hecht). H. D. Spoerl (American International College).

2582. Ford, A. Dynamic auditory localization: I. The binaural intensity disparity limen. *J. acoust. Soc. Amer.*, 1942, **13**, 367-372.—The purpose of this experiment was to determine how small a binaural intensity difference can be discriminated in a situation approximating that experienced in every-day life. By means of mechanical coupling, movements of the head were made to move the contacts of potentiometers in such a way as to produce differences in intensity in earphones held against the ears of the subject, who was asked to "point his nose at the sound." Pure tones of 200 and 2000 cps were used. "Pure tone localizations on the basis of intensity disparity show almost tenfold the size of the errors found under natural conditions. Unless leakage artifacts, under the Wilson and Myers postulate, produce larger intensity errors than we realize, it seems that we must expect that there *must* be some other cue for localization than pure 'intensity effect'."—S. S. Stevens (Harvard).

2583. Fowler, E. P. A method for measuring the percentage of capacity for hearing speech. *J. acoust. Soc. Amer.*, 1942, **13**, 373-382.—The author offers the following criteria for setting up a satisfactory method for measuring the capacity to hear air-borne speech: (1) a threshold audiogram for hearing-distance; (2) weightings for the various frequencies chosen; (3) allowance for recruitment factor (R. F.) which occurs in nerve deafness; (4) a means for estimating the percentage of loss for binaural as well as for monaural deafness; (5) provision for the changing increment of loss in capacity to hear speech accompanying slight, moderate, and severe deafness. A table of weightings

to be used in conjunction with measured audiograms is presented as an aid in satisfying these criteria.—S. S. Stevens (Harvard).

2584. Harwood, J. D. Depth perception. *Optom. Wkly.*, 1942, **33**, 119-120.—The Harwood version of the Howard-Dolman depth perception apparatus is illustrated, with the instructions set forth by the Civil Aeronautics Administration regarding the use of depth perception apparatus. Qualifications for student, private, and commercial pilot certification are quoted from the Civil Aeronautics Regulations.—D. J. Shaad (Lawrence, Kansas).

2585. Hobson, R., & Henderson, M. T. A preliminary study of the visual field in athletics. *Proc. Ia. Acad. Sci.*, 1941, **48**, 331-335.—Tests of 6 basketball players revealed that all had visual fields larger than normal and that the player who was rated by the coach as the best in ability to conceal passes exceeded the others in visual field. Fatigue decreased the size of the visual field, but recovery was rapid.—B. Wellman (Iowa).

2586. Hunt, E. P. Medical evaluation of nutritional status. VI. Dark adaptation of high school students at different income levels. *Milbank mem. Fd. quart. Bull.*, 1941, **19**, 252-281.—(Child Develpm. Abstr. XVI: 20).

2587. Kranz, F. W., & Rudiger, C. E. Relation of audiogram measurements to hearing aid characteristics based on commercial experience. *J. acoust. Soc. Amer.*, 1942, **13**, 363-366.—This report reviews the experience of a commercial company (Sonotone) in fitting hearing aids on the basis of measured audiograms.—S. S. Stevens (Harvard).

2588. Lowy, K. Experiments on the pellet-type artificial drum. *J. acoust. Soc. Amer.*, 1942, **13**, 383-388.—"1. The pellet-type of artificial drum, if placed on the stapes under slight pressure, improves hearing throughout the practical hearing range, especially for high tones. This is of importance for the understanding of speech. 2. The mechanism of action seems to be composed of two effects: *screening* and *increased stiffness* of the vibrating system. Under these circumstances bone conduction remains virtually unchanged. 3. Increased *mass* of the vibrating system produces low-tone improvement and (in absence of the screening effect) high-tone loss. This phenomenon can be demonstrated by weighting the system with a drop of mercury."—S. S. Stevens (Harvard).

2589. Lowy, K. The change of phase caused by impedance deafness. *J. acoust. Soc. Amer.*, 1942, **13**, 389-392.—"1. Interference with the sound-conductive mechanism causes a change in phase of the electrical cochlear response. 2. This effect does not consist in a sudden reversal of phase, but in a gradual shift. The former conception led to difficulties in understanding the course of deafness in otosclerosis, as pointed out by Pohlman. Considering the actual phase shift, as seen in the experimental oscillograms, we find that this paradox does not arise. 3. Injecting oil into the middle ear causes a phase shift which is qualitatively the same as the

one theoretically expected in a simple vibrating system when friction is increased. 4. If the malleus is put under constant pressure, a phase shift results which is similar to the one caused in a simple vibrating system by increased stiffness."—S. S. Stevens (Harvard).

2590. Mandelbaum, J. Dark adaptation; some physiologic and clinical considerations. *Arch. Ophthal., Chicago*, 1941, 26, 203-236.—Apparatus and techniques should introduce controls adequate to differentiate rod and cone adaptation. These include control of adapting light, of portion and area of retina stimulated, and of duration and color of test light. Pupil size and reactivity must also be controlled or compensated. The range of normal variation amounts to about one log unit, but individual daily variations may be as much as 0.3 log units. The cone-rod transition usually occurs 7-9 minutes after the beginning of adaptation, but may appear at 6 or 10 minutes. Mandelbaum found no effect on adaptation of one eye when he exposed the other at intervals to a bright light. Even after-images failed to interfere. The course of adaptation was not changed by use of strychnine, amphetamine, caffeine, phenobarbital, or morphine in pharmacologic doses. Alcohol shifted the whole curve upward without change in speed of adaptation; this is evidently not a direct effect on the process of dark adaptation but represents depressed activity of the central nervous system. Slow adaptation was not found associated with any ocular pathology investigated except that retinitis pigmentosa shows a selective impairment of rod adaptation. Recent work on vitamin A deficiency and adaptation seems to demonstrate the variability of individual responses.—M. R. Stoll (Lowell, Mass.).

2591. Murray, E. "Color blindness": current tests and the scientific charting of cases. *Psychol. Bull.*, 1942, 39, 165-172.—This article discusses the use and defects of the pseudo-isochromatic tests, individual variation in color deficiency and efficiency, devices to measure this variation, and the handicap of old hard-and-fast categories of color blindness. The author concludes that the present status of color vision research calls for an intensive study of thresholds for 4 (B, G, Y, & R) to 7 hues, distribution curves for 1000 subjects based on these thresholds or on the number of discriminable chroma steps for each hue, dark adaptation curves, and the correlation of hue sensitivity with dark adaptability.—F. McKinney (Missouri).

2592. Rosenblith, W. A. Industrial noises and industrial deafness. *J. acoust. Soc. Amer.*, 1942, 13, 220-225.—"Measurements on the intensity and the frequency distribution of industrial noises and the hearing losses of industrial workers show: (a) some degree of correlation between the average noise level and the temporary and permanent hearing losses; (b) an almost complete localization of the permanent hearing loss in the region above 1500 cycles (with a maximum at 6000 cycles), while the most important components of industrial noises are

practically always below this frequency-limit; (c) some correlation between the amount of temporary and permanent hearing losses for high frequencies; (d) a very small permanent hearing loss for low frequencies with a very rapid recuperation from temporary loss in this region."—S. S. Stevens (Harvard).

2593. Sabine, P. E. Bibliography on noise. *J. acoust. Soc. Amer.*, 1942, 13, 210.—This one-page bibliography, alphabetically arranged, includes books and articles on noise from the points of view of engineering, medicine, and industrial research. The bibliography covers the period from 1926 to 1940.—S. S. Stevens (Harvard).

2594. Taves, E. H. Two mechanisms for the perception of visual numerosness. *Arch. Psychol., N. Y.*, 1941, No. 265. Pp. 47.—The stimulus material consisted of fields of light dots on a dark ground projected tachistoscopically by means of an episcotister behind which were two 35 mm. still-film projectors. A scale for measuring the subjective magnitude, numerosness, was constructed by the method of fractionation and related to the objective magnitude, number of dots. A break in the latter function indicated that there are two mechanisms for the perception of visual numerosness, one operating at the lower portion and one at the higher portion (above 7 dots) of the range of stimulus magnitude. By means of the scale of numerosness the subjective sizes of the DL's at different stimulus levels were shown to be unequal, a finding which leads to the conclusion, on the basis of an hypothesis proposed by Stevens and Volkmann, that the discrimination of numerosness is mediated by a physiological mechanism which involves addition of one excitation to another as in the case of loudness, rather than the substitution of one excitation for another as in the case of pitch. Other experiments showed that the dimension of numerosness is different from that of apparent area and apparent density, and that the opposed attitudes of counting and not-counting and the placing of dots in a simple configuration affect the discrimination of numerosness.—K. W. Spence (Iowa).

2595. Tresselt, M. E., & Volkmann, J. The production of uniform opinion by non-social stimulation. *J. abnorm. soc. Psychol.*, 1942, 37, 234-243.—This experiment confirms the thesis that uniform opinions can be produced by stimulation that is primarily non-social. 120 subjects were asked to classify as light, medium, or heavy 12 weights, the 12 being presented once to each subject, but in varying orders. The judgment of medium was applied to a wide range of weights when each was presented as the first stimulus-object; by the 12th judgment, medium was restricted to a narrower range of objective weights. Thus, "while the different subjects entered the experiment with different scales of judgment, these scales rapidly approached uniformity and agreement," and this convergence was due to stimulation of other than a social nature.—F. W. Finger (Virginia).

2596. Ullmann, E. Änderungen des Farbensinns bei streng monochromatischer Beleuchtung durch monochromatisches Zusatzlicht. (Modifications in color vision under strictly monochromatic illumination, through supplementary monochromatic light.) *Arch. ges. Psychol.*, 1941, **108**, 317-371.—Small colored papers were briefly exposed and judged under illumination by sodium vapor lamps. The judgments varied considerably for all observers and were often changed after the first glance. The stimuli were then re-exposed under additional illumination of the papers only, with white and colored light. With white supplementary light the colors were correctly identified, and recognition was aided by supplementary light near the complementary colors. Recognition depends considerably on brilliance of the stimuli; a relatively slight intensity of supplementary light promoted improved recognition.—H. D. Spoerl (American International College).

2597. Wagman, I. H., & Nathanson, L. M. The influence of intensity of white light upon pupil diameter of the human and of the rabbit. *Proc. Soc. exp. Biol., N. Y.*, 1942, **49**, 466-470.—Changes in pupil size were measured by infrared photography. For both human subjects (6) and rabbits (10), the eye was dark adapted for 20-30 minutes. In the human subjects visual threshold was measured at the end of this time, and photographs of the pupil were made under threshold illumination. In rabbits the first photographs were taken at a brightness of 6.14×10^{-6} foot-lamberts, which does not cause a reaction in the dark adapted pupil. Light intensity was then increased in definite steps, and photographs were taken at intervals of 10, 20, 30, 45, and 60 sec. 60 sec. were sufficient to insure complete adaptation. When the results are compared with Reeves' data on pupil constriction in humans, the similarity is striking up to constriction of about 3 mm. The discrepancy from that point is attributed to the inaccuracy of Reeves' measurements at high intensities and to the fact that the last point on his curve was derived from observations on only one subject. The results for the rabbits show a higher threshold and less pupil diameter change with increasing intensity. The rabbit threshold is 2200 times greater than man's and 22,000 times greater than the owl's.—H. Peak (Randolph-Macon).

2598. Westlake, H. Hearing acuity in young children. *J. Speech Disorders*, 1942, **7**, 7-14.—Previous studies have indicated that the normal reference threshold, commonly used in audiometric testing with the 2-A (West. Electric) audiometer, cannot be used for children under the age of 8 years. Results of tests reported by the author, however, covering 875 children equally distributed in age groups between 3 and 8 years, indicate that the present accepted threshold norm is adequate for the younger children. There is less consistency in the responses of younger children than in those of older ones, and wider deviations from the normal threshold are found. Such variations are attributed,

however, to factors other than auditory acuity.—C. V. Hudgins (Clarke School).

2599. Williams, L. I. A test to determine the dominant eye. *Optom. Wkly.*, 1942, **33**, 33.—For the conventional eye dominance test at 20 feet, the card provided for the subject should be of black cardboard or metal, 5 by 7 inches, with 2 arrow points at the top of it. The subject is directed to concentrate on these 2 points as the card is raised at arm's length, held in the two hands, until the test letter at 20 feet slips down between the arrows. The eyes are then covered alternately to determine the fixing eye.—D. J. Shaad (Lawrence, Kansas).

[See also abstracts 2561, 2575, 2593, 2601, 2637, 2646, 2647, 2752, 2817, 2818, 2835.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

2600. Anderson, J. E. The relation of emotional behavior to learning. *Yearb. nat. Soc. Stud. Educ.*, 1942, **41**, Part 2, 333-352.—The essential similarities between learning and emotional phenomena are described. "Through learning, the child moves through a succession of contexts to integrated and well organized behavior and acquires mastery over his environment and control over his emotions."—P. S. de Q. Cabot (Simmons).

2601. Brandt, H. F. Ocular patterns as indices of intellectual achievement. *Proc. Ia Acad. Sci.*, 1941, **48**, 367-374.—Ocular patterns of 90 high school seniors while viewing cards containing 4 symbols were photographed. It was found that more time was spent on symbols appearing in the upper left position than in the lower right and that there was greater achievement in reproducing designs from the upper left corner. Excursions from one symbol to another were more frequently in a horizontal than a vertical direction. Position was a greater determiner of the level of achievement for persons of low than of high achievement.—B. Wellman (Iowa).

2602. Brogden, W. J., Non-alimentary components in the food-reinforcement of conditioned forelimb-flexion in food-satiated dogs. *J. exp. Psychol.*, 1942, **30**, 326-335.—The object of this study was to show that the frequency of CR (left forelimb flexion) differs for food-satiated dogs, depending on whether the CR is followed by food (experiment), or is not followed by food (control). As compared with results obtained after 18-20 hours of food-deprivation, the experimental animals showed a decrement of only 7.12% in the frequency of conditioned flexion, while the control animals showed complete extinction. The extinction results of the control animals were similar to those obtained from another group which had been deprived of food for 18-20 hours before extinction trials were made. Persistence of conditioning in the experimental animals is deemed to be due to non-alimentary components of food-presentation, since the animals desisted from eating

the food. "The data . . . are considered to support and best fit Anderson's theory of the externalization of drive."—*M. J. Zigler* (Wellesley).

2603. Brownell, W. A. Problem solving. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 415-443.—The writer examines the psychological and educational research on problem solving. The former has been chiefly concerned with problems involving puzzles, but promising changes have occurred over the last 15 years. The extent of educational research has been surprisingly limited. Piaget's researches together with criticisms are reviewed. Practical suggestions are given for developing ability in problem solving. So far as the schools are concerned, "children engage in true problem-solving behavior only when they envisage their learning tasks as problems."—*P. S. de Q. Cabot* (Simmons).

2604. Buxton, C. E. Reminiscence in the acquisition of skill. *Psychol. Rev.*, 1942, 49, 191-196.—On the assumption that the phenomenon of reminiscence should be unambiguously shown in the acquisition of skill, the author recomputed the data from a number of studies involving spacing of practice. He found evidence of reminiscence, in the superior performance by those groups tested after a rest interval, over those tested immediately. In one study, this superiority held up to 24 hours.—*A. G. Bills* (Cincinnati).

2605. Coffey, H. S. A study of certain mental functions and their relation to changes in the intelligence of preschool children. *Univ. Ia Stud. Aims Progr. Res.*, 1941, No. 69, 46-51.—Abstract of doctoral dissertation.

2606. Farber, I. Spread of effect of reward and punishment in a multiple choice situation. *Proc. Ia Acad. Sci.*, 1941, 48, 313-317.—The experimental situation was a punchboard maze consisting of 35 groups of holes arranged in a spiral pattern, each group being in the form of a hexagon. The "spread of reward" condition contained 5 successful responses, each of which was preceded and followed by several unsuccessful ones; the "spread of punishment" condition contained 5 unsuccessful responses preceded and followed by several successful conditions. 36 subjects were used for each condition. The theoretical formulation which denies comparable and opposite functions to punishment and reward was substantiated. The phenomenon known as spread of effect obtained for reward, but the weakening effect of a punishment upon the response preceding it or upon contiguous rewarded responses was not demonstrated.—*B. Wellman* (Iowa).

2607. Feinberg, H. IQ correlated with EQ. *J. educ. Psychol.*, 1941, 32, 617-623.—715 children at a mental hygiene clinic were examined with the Stanford Binet and the New Stanford Achievement Test and IQ's and EQ's obtained. "The correlation obtained on the whole [group] . . . does not differ from correlations obtained in groups described by other persons. However, when it is broken down in diagnostic groups there appears to be a negative correlation among the mental defectives, persons of

borderline intelligence and persons of dull normal intelligence, a slight correlation among persons having high normal general intelligence, and a substantial correlation among the persons having normal and superior general intelligence. Significant differences were found between the mean performances of males and females on both intelligence and educational tests. . . . There appears to be a perceptible rise in correlation with the rise of IQ, although the high normals are an exception to this. From the evidence on hand the EQ cannot be substituted for the IQ."—*J. W. Macmillan* (Maryland).

2608. Festinger, L. Wish, expectation, and group standards as factors influencing level of aspiration. *J. abnorm. soc. Psychol.*, 1942, 37, 184-200.—A group of college students were given synonym and information tests, told their scores, and asked what they "expected" to get on the next test. After the second test-session they were again told their scores, this time in relation to a fictitious group (above or below high school students, college undergraduates, or graduate students) before being asked to predict their future score. A second experiment was conducted similarly, except that the information was obtained of the score the subjects "would like" to make. The subjects in the first experiment tended to react realistically: their discrepancy score (expected score minus actual score) increased between sessions when told that they scored below a group, and decreased, if scoring above a group. The subjects of the second experiment responded in a wishful manner: their discrepancy score decreased when scoring above a group, but also lowered when they were placed below the graduate group. In the unrealistic second group the downward shifts were significantly larger than the upward shifts.—*F. W. Finger* (Virginia).

2609. Guthrie, E. R. Conditioning: a theory of learning in terms of stimulus, response and association. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 17-60.—Any alteration in behavior resulting from experience is learning. The principle of association which states that "patterns of stimuli which are acting at the time of a response tend, on their recurrence, to occasion that response," applies to movements and emotional responses. We learn only what we do. Responses are associated with and dissociated from new stimuli so that forgetting is not due simply to the lapse of time.—*P. S. de Q. Cabot* (Simmons).

2610. Harlow, H. F. Responses by rhesus monkeys to stimuli having multiple sign-values. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 105-123.—"Four rhesus monkeys were trained to solve problems of matching-from-sample, nonmatching-from-sample, sign-discriminated-antagonistic-position-habits, and reversed-sign-discriminated-antagonistic-position-habits. In the final stage of the problem, the four separate tasks were presented in random sequence. This final problem was solved by all four monkeys. Solution of the last problem is

possible only if the final response set of the monkeys is governed by four variables, the nature of the sample-object, the nature of the food-sign, the positions of the choice-objects, and the identity or non-identity of the sample-object with either or both choice-objects."—G. S. Speer (Central YMCA College).

2611. Hartmann, G. W. **The field theory of learning and its educational consequences.** *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 165-214.—In its most universal interpretation, field theory is less a psychological system and more a philosophy of nature. Concrete illustrations of a field are given with reference to the solar system, the living organism, psychological and large scale phenomena, and ordinary classroom situations. The validity of the field hypothesis is discussed with reference to holistic psychology, the interpretation of customary psychological data, physiological evidence, the acquisition of motor skills, rote and logical memory, problem solving, learning and differentiation. A tentative list of behavioral deductions, derived from a consideration of field theory, with practical implications for learning and pedagogic procedures is given, followed by an organized and selected bibliography dealing with aspects of field, organismic, Gestalt, and topological psychology.—P. S. de Q. Cabot (Simmons).

2612. Haverkamp, H. J. **Implementing recall.** *Proc. Ia Acad. Sci.*, 1941, 48, 353-355.—The effectiveness of 3 classroom learning conditions was compared: (1) reading of a selection of factual material followed by a completion test, (2) a single reading of the material, and (3) reading of the material followed by rereading. 5 classes of University students were divided at random into the 3 above groups. A criterion test administered immediately after learning showed that the rereading group made significantly higher scores than the other groups. On a retest a week later, the rereading group was higher than the single reading group, but was not significantly higher than the recall group.—B. Wellman (Iowa).

2613. Headlee, C. R. **Modification of the conditioned response under Nembutal.** *Proc. Ind. Acad. Sci.*, 1941, 50, 193-198.—6 dogs were conditioned to lift the right rear leg by the buzz-shock method. "Each dog was given training on four different days, separated by from one to two weeks, totaling 400 trials." A hypnotic dosage of Nembutal, administered interperitoneally, was given to 3 dogs on the 1st and 3rd days, to the 3 other dogs on the 2nd and 4th session of 100 trials each. "Recordings were made of the movements of all four limbs, and the conditioned lifts of each of these limbs were measured and tabulated according to absolute frequency, total amplitude, and several other measures." Some qualitative observations are reported and two pairs of learning curves presented. "The learning process could take place even under the inhibiting influence of a depressing drug, though at a lower level and rate. . . . The learning curve here found approximates the

typical conditioning sigmoid curve."—G. R. Thornton (Purdue).

2614. Hull, C. L. **Conditioning: outline of a systematic theory of learning.** *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 61-95.—The author presents a systematic theory of learning with a discussion of environment, organism and organismic need, a restatement of the law of effect with the conditioned reaction as a special case, the variability of behavior, trial and error learning, social adaptation, individual symbolic behavior, and practical educational applications of the principles of learning, as expounded by the writer.—P. S. de Q. Cabot (Simmons).

2615. Irion, A. L. **Retroactive inhibition as a function of the relative serial positions of the original and interpolated items.** *Proc. Ia Acad. Sci.*, 1941, 48, 325-329.—The experiment was intended to investigate the effects of identical and changed serial order between the original and interpolated lists when the lists were composed of synonyms and when they were composed of identical words. The inhibitory action of changed serial position was found to be to a large extent a function of the material to be learned. The interpolated learning of the original material in a changed order was capable of producing as much inhibition as the interpolation of synonyms either in the same or in a changed order.—B. Wellman (Iowa).

2616. Lewin, K. **Field theory of learning.** *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 215-242.—A survey of the field-theoretical approach to problems of learning.—P. S. de Q. Cabot (Simmons).

2617. Maier, N. R. F., & Schneirla, T. C. **Mechanisms in conditioning.** *Psychol. Rev.*, 1942, 49, 117-134.—The attempt to reduce trial-and-error learning and conditioning to a common principle has been aided by recent evidence demonstrating the apparent function of motivation in the conditioning process. Reasons are here presented for keeping the two kinds of learning distinct. It is the first stage of the conditioning procedure that involves the unique feature of conditioning or associative, as contrasted with selective, learning, i.e. the development, through contiguity, by a neutral stimulus, of power to excite a response it previously did not control. In a later stage, unconditioned stimuli such as food and shock can function as do reward and punishment in trial-and-error learning, so that the distinction between selective and associative learning may break down. Therefore the term 'conditioning' should be restricted to the first stage of the procedure. Performing tests which are really problem-box experiments and calling the process conditioning merely confuses the issue. The commonly accepted view of conditioning as depending on a new sensori-motor connection is rejected in favor of one assuming a new dynamic relation between the sensory cortical patterns of the conditioned and unconditioned stimuli.—A. G. Bills (Cincinnati).

2618. McConnell, T. R. Reconciliation of learning theories. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 243-286.—This analysis of several systematic viewpoints of the learning process, presented by other authors in this issue of the *Yearbook*, emphasizes the exceedingly complex nature of this process. Differences and similarities among these writers are given and discussed. "Educational psychologists must undertake a systematic attack upon problems of learning which are educationally significant at all levels of maturity." Learning is only one aspect of a much larger adjustment process in which emotional behavior is an important factor. The most important problem in education is the development of meanings in relation to the improvement of thinking in a democratic society.—P. S. de Q. Cabot (Simmons).

2619. Melton, A. W., & Stone, G. R. The retention of serial lists of adjectives over short time-intervals with varying rates of presentation. *J. exp. Psychol.*, 1942, 30, 295-310.—The object of this study was to ascertain whether reminiscence, such as has been reported in experiments involving nonsense materials, occurs in recall involving meaningful materials following intervals of rest longer than 6 sec., and whether the amount of reminiscence varies with the rate of presentation. Serial lists of 16 adjectives were learned until at least 12 were correctly anticipated. Then, after varying rest-periods (6 seconds, 2, 5, and 20 minutes), the lists were relearned to two successive errorless anticipations. Two rates of presentation per item were employed. Increase in the rate of presentation was found to increase the trials required for partial or complete learning, particularly for middle items in the lists, presumably owing to increase in the amount of intra-serial inhibition in learning. Decrement in recall, instead of reminiscence, was found to occur following the longer intervals of rest.—M. J. Zigler (Wellesley).

2620. Owens, W. A., Jr. A new technic for measuring the effect of practice upon individual differences. *Proc. Ia Acad. Sci.*, 1941, 48, 396.—Abstract.

2621. Petrova, M. K. [Materials towards an understanding of the physiological mechanisms of voluntary movements.] *Trud. fisiol. lab. Pavlova*, 1941, 10, 41-50.—Two 9-year old dogs and one 1-year old dog were used to see whether they would flex their legs to a preceding conditioned stimulus if the flexion, produced by means of a special instrument, was followed by feeding (Miller-Konorski technique). The first 2 dogs failed in the task although the flexion acquired salivary CR properties. The third dog succeeded. At first the conditioned stimulus was the experimenter's verbal stimulus *nogu* (foot, leg) accompanying the flexing, but later a metronome at 144 beats per minute became just as effective. Conditioned inhibition was tried in 2 ways. (1) Metronome and the flexion were not accompanied by food for the left hindleg, but were continually reinforced for the right hindleg. (2)

Flexion of the right hindleg was combined with a stimulus other than the metronome and the combination not reinforced with food. In both situations the animal developed resistance or sleep. The failure of the first two dogs is attributed to old age and to the possession of too many old CR's.—G. H. S. Rasan (Queens).

2622. Reynolds, B. The mnemonic function of interference. *J. exp. Psychol.*, 1942, 30, 336-341.—Subjects were required to learn successive presentations of 3 kinds of stimuli (shock, buzzer, light) each of which was presented with a pair of colored lights, one of which was correct for each stimulus. The subject had to press a button to turn out the correct light. Pressing any other button failed to turn out the light and did not stop the reaction time device. Learning trials comprised two series. One series was learned until 9 correct choices had been made with fairly uniform reaction times. A second series was then learned in which the response that had been incorrect in the first series was the correct one. Then "Group I worked match tasks for six minutes, while Group II learned a third series in which the incorrect responses for Series II became correct and were paired with new incorrect responses. Both groups then relearned the Series I." Group I now showed a large amount of inhibition, Group II, a small amount. "These results support the theory that holds forgetting to be a function of transfer effects in learning."—M. J. Zigler (Wellesley).

2623. Rubin-Rabson, G. Studies in the psychology of memorizing piano music. VI: A comparison of two forms of mental rehearsal and keyboard overlearning. *J. educ. Psychol.*, 1941, 32, 593-602.—9 skilled adult pianists learned difficult selections by 3 methods. "The first introduced a four-minute period of mental rehearsal or 'imaginary' practice after five keyboard trials or midway in the learning, then continued the keyboard trials to the criterion of perfect memorized performance. The second carried the keyboard trials to the criterion, then added four minutes of mental rehearsal. The third, like the second, reached the keyboard criterion, then added extra keyboard trials for four minutes. The midway period of mental rehearsal or 'imaginary' practice proved reliably superior to the other time distributions. It not only reduced the required keyboard trials, but achieved retention as good as that offered by the four minutes of extra keyboard trials, which . . . resulted in an approximate one hundred per cent over-learning."—J. W. Macmillan (Maryland).

2624. Rubin-Rabson, G. Studies in the psychology of memorizing piano music. VII. A comparison of three degrees of overlearning. *J. educ. Psychol.*, 1941, 32, 688-696.—9 skilled pianists learned musical compositions by keyboard practice until one smooth performance was reached. They then overlearned 50, 100, and 200%. Almost no differences were found between the 3 degrees of over-

learning for relearning after 2 weeks and again after 7 months.—*J. W. Macmillan* (Maryland).

2625. Ryans, D. G. Motivation in learning. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 289-331.—Topics include: causation of behavior, effects of motivation on learning, criteria of motivation, development of motives, relativity of motivation, meaning and motivation, types of motives and incentives affecting learning, motivation in the classroom. In general, emphasis on meanings and relationships enhances one's set for learning; the first step in learning is to create adequate interests, attitudes, and purposes; goals and standards must be adapted to pupil ability; maximum efficiency demands definite objectives; learning is helped by specific directions and suggestions for learning; reward and praise may be effective incentives, and punishment has probably limited value in the motivation of learning, while the teacher plays an important part in enhancing motivation.—*P. S. de Q. Cabot* (Simmons).

2626. Sandiford, P. Connectionism: its origin and major features. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 97-140.—Although not considered as a "school," connectionism, associated with the name of E. L. Thorndike, has an important influence on practical education. Essentially it is a synaptic theory of learning and an outgrowth of Alexander Bain's association theory. It has evolutionary implications with an emphasis upon the study of heredity; it is atomistic rather than holistic; is affiliated with conditioning and stresses the mechanistic aspects of behavior; experiments ceaselessly and interprets intellect and intelligence quantitatively rather than qualitatively. The influence of associationism and animal psychology upon connectionism is outlined.—*P. S. de Q. Cabot* (Simmons).

2627. Sears, R. R. Success and failure. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 235-258.—Two groups each of 12 male high school seniors, originally equated on motility scores, were compared after success or failure on a card-sorting test. Three characteristic trends were observed in the reaction to failure: (1) a decrease in general motility level, sharp increase in day-dreaming and autistic thinking, and reduction of social responsiveness; (2) dogged but ineffectual continuation of the task at which failure occurred, or persistent non-adjustive behavior; and (3) a process of decontextualization which splits off the activity from its social frame of reference and reduces its contact with reality.—*G. S. Speer* (Central YMCA College).

2628. Spencer, E. M. The retention of orally presented materials. *J. educ. Psychol.*, 1941, 32, 641-655.—2212 6th grade pupils were divided into 9 groups of 8 classes each. Two short articles were read to the groups, the first to measure the groups' ability to learn, the second to measure the retention. 25-item multiple choice tests were administered to obtain these measures. "Recall stimulated by a written recognition test is beneficial to the retention

of information presented orally and is most effective in retarding forgetting when the test is given immediately after learning. A response to two intervening tests soon after learning results in significantly better retention than does a response to one intervening test. The effectiveness of a written recognition test in retarding forgetting is not limited to one method of presentation, but it may profitably be used to aid the fixation of ideas learned from oral instruction as well as from reading."—*J. W. Macmillan* (Maryland).

2629. Stephens, J. M. Expectancy vs. effect—substitution as a general principle of reinforcement. *Psychol. Rev.*, 1942, 49, 102-116.—Hilgard and Marquis have suggested that neither the principle of effect nor substitution is adequate to explain reinforcement and offer the principle of expectancy as a blanket law. But this principle fails to account for reinforcement when an undesired expectancy is not confirmed or when an unexpected but biologically valuable outcome is attained. A two-phase principle which incorporates the mutually supplementing advantages of effect and substitution is offered, as follows: "A. A conditioned stimulus after being presented a few times, will come to elicit some response resembling the unconditioned response which follows the conditioned stimulus. B. After many presentations the conditioned stimulus will come to elicit some response which combines adaptively with the subsequent unconditioned stimulus." A single quantitative expression of the two-phase principle is suggested.—*A. G. Bills* (Cincinnati).

2630. Stroud, J. B. The rôle of practice in learning. *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 353-376.—Practice is a condition rather than a method of learning. Learning does not necessarily take place with practice. Conditions of learning by practice refer to individual differences, the character of the material to be learned, the method of presentation, incidental learning, drill, transfer of training, motivation, knowledge of results, recall, distribution of practice periods, and the amount of practice.—*P. S. de Q. Cabot* (Simmons).

2631. Sutherland, J. An investigation into some aspects of problem solving in arithmetic. *Brit. J. educ. Psychol.*, 1941, 11, 215-222; 1942, 12, 35-46.—To determine the effect of familiarity of the situation on the pupils' ability to solve arithmetic problems, and to discover by factorial analysis what abilities are involved, a battery of 13 tests was administered to 352 children, ages 10 and 11 years. A measure of the familiarity of the situations involved in the arithmetic problems was obtained by a method demanding no arithmetical computation. In the group of 134 11-year olds who took all the tests the mean score in arithmetic problems set in familiar situations was significantly greater than that for those set in unfamiliar situations, with 123 pupils out of the total showing a higher score on the former type. Factorization of the correlation matrix yielded 5 factors, of which the 3 major ones were identified as *g*, a verbal factor, and a number

factor. These 3 components appeared in equal proportions.—*R. C. Strassburger* (St. Joseph's College for Women).

2632. Underwood, B. J. The effects of punishment in serial verbal learning. *Proc. Ia Acad. Sci.*, 1941, 48, 349-352.—Each subject in two groups served through 4 experimental conditions: (1) retroactive inhibition control, (2) retroactive inhibition, (3) proactive inhibition control, and (4) proactive inhibition. Punishment in the form of a bell had no facilitating effect on the speed of learning. Negative transfer was present in both groups during interpolated learning, but no proactive inhibition was present at the recall point following the rest period. The palmar skin resistance levels were consistently lower for the punished than for the non-punished. Correlation coefficients varying from .55 to .70 were found between the frequency of correct anticipations and the frequency of psychogalvanic responses occurring during the period when the correct anticipations were made. No relationship was found between either the initial or final resistance levels and the speed of learning.—*B. Wellman* (Iowa).

2633. Wallen, R. Ego-involvement as a determinant of selective forgetting. *J. abnorm. soc. Psychol.*, 1942, 37, 20-39.—Bogus ratings presented as genuine are altered in recall so as to make them more compatible with the subjects' opinions of themselves. This must be attributed to reorganization dependent upon stresses arising from the ego field rather than to different degrees of mastery of the various parts of the remembered material.—*C. H. Johnson* (Portland, Ore.).

2634. Warden, C. J., Ross, S., & Zamenhof, S. The effect of artificial changes in the brain on maze-learning in the white rat. *Science*, 1942, 95, 414-415.—Injections of pituitary growth hormone (Antuitrin G and Phyone) into pregnant rats resulted in statistically significant greater brain cell proliferation in their offspring. In a study to determine whether this resulted in better learning performance 9 male and 7 female rats of this type, who showed 38-40% greater number of cortical neurones than 22 control animals, were tested in a maze. No statistically significant differences were found. Yet, cortical neurone increase might be effective in a task representing a higher level of intelligence than maze learning ability.—*F. A. Mote, Jr.* (Connecticut).

2635. Yaczynski, G. K. Degree of effort: II. Quality of work and time of completion of performance tests. *J. exp. Psychol.*, 1942, 30, 342-344.—3 of the Wechsler-Bellevue intelligence tests (object assembly, picture arrangement, and Kohs block design) were given according to manual directions, except that time was unrestricted. "Four groups of subjects, with 10 subjects in each group, were selected on the basis of the varying degree of effort expended as determined by the open and blocked runway tests described in the preceding study [see XVI: 2250]."
The object was to test the assumption that "the quality of work

and the time taken to complete the tasks should be directly related to the degree of effort expended." The only significant difference found to exist between the scores of the groups concerns the time required to complete the Kohs block design test.—*M. J. Zigler* (Wellesley).

2636. Youtz, R. The status of certain conditioning principles after the eclipse of 'reflex psychology.' *Trans. N. Y. Acad. Sci.*, 1942, 4, 153-167.—Although the conditioned reflex has come to be regarded as only a "very minor aspect of learning," yet conditioning principles "have brought light and explanatory power to a fairly wide range of psychological problems." This is illustrated with respect to trial and error learning, the transposition (relative discrimination) experiment, and rewarded verbal learning.—*F. W. Finger* (Virginia).

[See also abstracts 2560, 2706, 2708, 2727, 2739, 2755, 2850, 2853, 2870, 2896, 2932.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

2637. Basu, N. M., & De, N. K. Assessment of vitamin A deficiency amongst Bengalis and determination of the minimal and the optimal requirements of vitamin A by a simplified method for measuring visual adaptation in the dark. *Indian J. med. Res.*, 1941, 29, 591-612.—(Biol. Abstr. XVI: 9743).

2638. Beach, F. A. Central nervous mechanisms involved in the reproductive behavior of vertebrates. *Psychol. Bull.*, 1942, 39, 200-226.—This review assembles evidence, from fish to man, regarding the function of the central nervous system in reproductive behavior (courtship, mating, and care of young). The following are among the generalizations from the facts presented: Changes from stereotyped inherited sex behavior to behavior dependent upon experience have occurred concomitantly in the evolution of the vertebrates with a gradual increase in the size and specialization of the forebrain. The forebrain is responsible for the pattern of response and not the discrete acts involved. A forebrain injury may result, however, in the elimination of one or more specific elements in the pattern, and a reduction in the animal's excitability. 99-item bibliography.—*F. McKinney* (Missouri).

2639. Burks, B. S. A study of identical twins reared apart under differing types of family relationships. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 35-69.—This is a study of monozygotic twin girls who were separated when less than 2 weeks old and reared in different adoptive families of similar socio-economic status but differing environmental circumstances. Certain aspects of temperament and social behavior were so strikingly similar as to suggest congenital predispositions, although a group of social-emotional traits showed decided differences. There is a tendency for certain traits to become more similar with age (intelligence test performance, vocational interest), while others become more

marked in their differences (social conformity, etc.).—*G. S. Speer* (Central YMCA College).

2640. Fay, P. J., & Middleton, W. C. Judgment of emotional balance from the transmitted voice. *Character & Pers.*, 1941, 10, 109-113.—Emotional balance of the speakers was first determined by ratings on Part D of the ACE Personality Rating Scale and the Clark Revision of the Thurstone Personality Schedule, the latter by sorority sisters. Each voice was then heard over the radio twice and was rated again on each audition on Part D of the ACE scale, by upper classmen as judges. On the basis of reliability coefficients of the ratings and the correlation of judgments of listeners and sorority sisters it is concluded that the method described is unreliable. This unreliability may be due in part to nervousness on appearing before the microphone, which likely affected the voice.—*M. O. Wilson* (Oklahoma).

2641. Fisher, J. *Watching birds*. Harmondsworth, England; New York: Penguin Books, 1940. Pp. 192. \$0.25.—[Abstracted review; original not seen.] This book discusses on an elementary level the problems and methods of study in the field of ornithology. Special chapters concern bird behavior, migration, habitats, and breeding cycles. Most of the examples given relate to the activities of British birds.—*W. E. Kappauf* (Princeton).

2642. Herrington, L. P. The relation of physiological and social indices of activity level. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 125-146.—Pressure of activity is felt to be an important aspect of personality. The trait is evaluated by measure of pulse, respiration, systolic blood pressure, BMR, and by a combined index, for a group of 11 young men of similar physical condition, intelligence, and educational background. Although a partial physiological background for the trait is suggested by the association between it and the physiological measures, it is not felt that this is a direct association, but more probably the physiological signs are superficial indicators of much more general properties of the autonomic nervous system.—*G. S. Speer* (Central YMCA College).

2643. Huntsman, A. G. Return of a marked salmon from a distant place. *Science*, 1942, 95, 381-382.—*F. A. Mote, Jr.* (Connecticut).

2644. Keys, A., & Henschel, A. F. Vitamin supplementation of U. S. Army rations in relation to fatigue and the ability to do muscular work. *J. Nutr.*, 1942, 23, 259-269.—Soldiers on standard U. S. Army garrison rations were subjected to standardized severe exercise on the treadmill. Circulatory, metabolic, and blood chemical responses were studied. Large daily supplements of thiamine chloride, riboflavin, nicotinic acid, pyridoxine, pantothenic acid, and ascorbic acid were administered over periods of 4-6 weeks alternating with equal periods of placebo administration. The vitamin supplementation had no effect whatever on muscular ability, endurance, resistance to fatigue,

or recovery from exertion. Healthy young men expending 3700-4200 calories per day are not benefited by a daily supply of more vitamins than are contained in the garrison ration.—*M. E. Morse* (Baltimore, Md.).

2645. Kretschmann, O. Beiträge zur Frage nach der Vererbung der zeichnerischen Anlagen. (Contributions to the question of the inheritance of graphic talents.) *Arch. ges. Psychol.*, 1941, 108, 267-316.—Drawings, copied after a model, by parents and by their children were examined by 10 judges, who matched parental with filial products on the basis of similarities in technique and style. The age of the children ranged from 3 to 18. Correct matches were considerably above chance expectation, which was also true for matches according to like sex. It is supposed that these results point toward hereditary determination.—*H. D. Spoerl* (American International College).

2646. Lochhead, J. H. Control of swimming position by mechanical factors and proprioception. *Quart. Rev. Biol.*, 1942, 17, 12-30.—The mechanical and sensory factors involved in the maintenance of normal upright swimming posture in aquatic forms are reviewed with brief reference to their method of study. The mechanical factors, similar to those which make for aeroplane stability, include the location of the center of gravity below the center of buoyancy and the forces of propulsion and fluid resistance when the animal's specific gravity is different from that of water. Among the sensory factors considered are photic sensitivity, proprioception, and sensitivity of the animal's body to surface currents and "echo currents."—*W. E. Kappauf* (Princeton).

2647. Luckiesh, M., & Moss, F. K. A restricted extension of Fechner's law from sensation to behavior. *Psychol. Rev.*, 1942, 49, 135-142.—Fechner's law of sensation holds quite closely over that range of retinal illuminations which are significant for effective visual performance. Similarly, it can be shown that certain psychophysiological concomitants of critical seeing vary arithmetically as the level of illumination varies in geometric ratio. A systematic study of two such effects—the development of muscular tension of the fingers, and the augmentation in the rate of blinking during prolonged and critical visual effort, while reading under different intensities of illumination—shows that they follow the Fechnerian law over a rather wide range. Since those are motor responses of an involuntary character, an empirical basis for extending the law from sensation to behavior is suggested.—*A. G. Bills* (Cincinnati).

2648. Lynn, J. G. Mimetic smileness as related to handedness: an indicator of basic modes of human adaptation. *J. nerv. ment. Dis.*, 1942, 95, 481-482.—Abstract.

2649. Olson, W. C., & Hughes, B. O. The concept of organismic age. *J. educ. Res.*, 1942, 35, 525-527.—Organismic age is an average of mental age, dental age, reading age, weight age, height age,

carpal age, and grip age. It is useful in growth research and individual study.—*M. Murphy* (Pennsylvania).

2650. Palmer, R. S. A behavior study of the common tern (*Sterna hirundo hirundo* L.). *Proc. Boston Soc. nat. Hist.*, 1941, 42, No. 1. Pp. 119 + 14 plates.—Based upon extensive field observation, this study deals with its subject under two headings, the environment in the breeding season, and behavior during the breeding cycle. Among the conclusions of the first section are the following. Requisites for a tern colony include geographic isolation, adjacent source of food, and a terrain which permits nesting birds to see and hear the rest of the colony. Many species of birds may nest in tern colonies, but the relationship is one of chance. Jaegers and some gulls are occasionally parasitic upon terns. The second part of the study includes description of courtship and mating patterns, and an abbreviated developmental schedule for young terns. Males establish nesting territories into which prospective mates are inveigled by special reactions. When such an invitation is accepted, the resident male determines the sex of his guest in a pecking ceremony. Males are driven away and females courted. A sexual bond is established, and elaborate courtship patterns serve to synchronize the breeding cycles of the mates.—*F. A. Beach* (American Museum of Natural History).

2651. Pauli, R. Die Arbeitskurve in der psychologischen Zwillingsforschung. (The work curve in the psychological study of twins.) *Arch. ges. Psychol.*, 1941, 108, 412-424.—The curves of performance of continuous addition for 1½ hours by 9 mono- and 9 dizygotic twins, as presented by Becker and Lenz, were analyzed for maximum performance, peak performance, and fluctuations. For each criterion the behavior of the monozygotic twins was very similar, while variation between dizygotic twins averaged 70%. Thus fatigue, adaptation, endurance, and work rhythm become subject to genetic investigation.—*H. D. Spoerl* (American International College).

2652. Sen Gupta, N. N. Heredity in mental traits. London: Macmillan, 1941. Pp. xii + 207. 7s. 6d.—[Abstracted review; original not seen.] This is a general survey of what is known about the inheritance of mental traits. Theories of heredity are discussed, and the work of McDougall and others on the Lamarckian hypothesis is stressed.—*N. R. Bartlett* (Brown).

2653. Seward, J. P. Note on the externalization of drive. *Psychol. Rev.*, 1942, 49, 197-199.—There is an implicit assumption underlying most of the predictions made by Anderson (see XV: 3746) on the basis of his externalization of drive theory, which should be made explicit; i.e. that, in becoming externalized, a drive is not merely aroused by but also directed toward the reward. Otherwise, changes in the goal could not affect performance in the maze before the goal is reached.—*A. G. Bills* (Cincinnati).

2654. Shultz, I. T. The emotions and the tubercular: a review and an analysis. *J. abnorm. soc. Psychol.*, 1942, 37, 260-263.—It appears that there is more emotional maladjustment in the sanitarium population than in the general population. Most modern opinion points to the conclusion that tuberculosis merely accentuates the maladjustments present before the onset of the disease; other crises would have evoked similar patterns of response. There is a current trend toward a broader program of educational and vocational rehabilitation as a factor in emotional readjustment. 25 references.—*F. W. Finger* (Virginia).

2655. Siegel, H. H. Explanation of sleep symptoms at near point. *Optom. Wkly.*, 1942, 33, 201.—Reduced cortical excitation in the reading situation is suggested as contributing to sleep symptoms.—*D. J. Shaad* (Lawrence, Kansas).

2656. Tinker, M. A. Individual and sex differences in speed of saccadic eye movements. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 271-280.—Employing 7 male and 7 female college students as subjects, the experiment studied, through analysis of variance, individual and sex differences in speed of saccadic eye movements under 7 conditions of angles through which the eye sweeps. It is concluded that "individual differences in speed of saccadic eye movements and differences due to extent of movement are highly significant but that sex differences are insignificant."—*G. S. Speer* (Central YMCA College).

2657. Tulin, I. F. [Function of the olfactory organs as a factor for the realization of normal development of the sexual system and libido in rats.] *Bull. Biol. Méd. exp. URSS*, 1941, 12, 59-61.

2658. Vernon, P. E. Is the doctrine of instincts dead? A symposium. II. Some objections to the theory of human instincts. *Brit. J. educ. Psychol.*, 1942, 12, 1-9.—Evaluation of 7 of the main arguments against the instinct theory, representing chiefly the consensus of American criticism, reveals that several can be discounted, while others have greater cogency. As regards those implications of the hypothesis which are matters of practical significance, namely, the consistency, fixity, and hereditary resemblance of instinctively determined behavior, the first is not a necessary indication of an innate propensity, the second cannot be proved, and may have, moreover, harmful consequences in education, while the evidence for the last is equivocal. As Burt has contended, impulse and conation, rather than unlearned behavior should be stressed. This concept of the effective drives regarded as culturally determined sentiments and complexes, modifiable even during adulthood, is of practical importance to the educator.—*R. C. Strassburger* (St. Joseph's College for Women).

2659. Williams, R. J. Vitamins in the future. *Science*, 1942, 95, 340-344.—In the course of his general discussion of vitamins the author refers to their effects upon personality, mental disorders,

and intelligence, expressing the belief that the union of biochemistry and psychology will prove an important field of knowledge.—*F. A. Mote, Jr.* (Connecticut).

2660. Yazigi, R. [Prevention and therapy of coronary insufficiency in flying.] *Rev. méd. Chile*, 1939, 67, 689 ff.—[Abstracted review; original not seen.] In South America altitudes of 7000 meters are frequently reached, and this, combined with low temperatures, often causes functional circulatory disorders in normal passengers and pilots. The disorders due to anoxemia of nerve tissues are a condition similar to drunkenness, with overconfidence, insensitivity to pain, and sometimes somnolence. Inhalation of oxygen will not prevent accidents due to anoxemia. Passenger airships should be provided with a proper heating system and a hermetic cabin regulated for the use of oxygen and the proper atmospheric pressure and humidity. The refined cabin is not practical for military planes.—*M. E. Morse* (Baltimore, Md.).

[See also abstracts 2568, 2570, 2586, 2597, 2600, 2601, 2613, 2621, 2625, 2682, 2734, 2766, 2802, 2815, 2820, 2827, 2828, 2837, 2864, 2921.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

2661. Agadjanian, K. *Introduction à l'étude expérimentale du problème de l'hallucination*. (Introduction to the experimental study of the problem of hallucination.) Paris: J. Pevronnet, 1940. Pp. 86.—[Abstracted review; original not seen.] Bechterev's method of associated reflexes was utilized in the study of 21 hallucinators. In the course of hallucinating, perception is not suspended but is diminished. Central disturbances of perceptual processes promote hallucinatory activity, leading to inhibition of perceptual interpretations of real stimuli.—*H. D. Spoerl* (American International College).

2662. Coffin, T. E. Some conditions of suggestion and suggestibility: a study of certain attitudinal and situational factors influencing the process of suggestion. *Psychol. Monogr.*, 1941, 53, No. 4. Pp. 125.—Experimental evidence is presented dealing with suggestion in response to propaganda, in interpretation of ink blots, in reaction to examination instructions, and in judgments of the attributes of tones. Preexisting attitudes are found of extreme importance, and situational factors (having to do with structuration or meaningfulness), of great importance. "When the situation is 'well-structured,' in terms of either attitudinal or situational factors, those suggestions which are in accord with the existing structuration will tend to be accepted; those which conflict, will tend to be rejected. When, for the individual, no clear structuration is perceived, either in terms of existing attitudes or by way of unambiguous stimulus-characteristics, and when some form of response is required of the subject, he will tend to be suggestible to the 'propositions' presented by the experimenter."—*D. G. Ryans* (Cooperative Test Service).

2663. Flugel, J. C. *Sublimation: its nature and conditions. Part I*. *Brit. J. educ. Psychol.*, 1942, 12, 10-25.—The concept of sublimation in the accepted psychoanalytic sense raises several controversial psychological issues. If the orectic or impulsive energy "deflected" in sublimation is regarded as general rather than as specifically associated with sex, aggression, or any other instinct, a view supported by the weight of authority, the notion of sublimation loses much of its meaning and utility. Yet apart from the existence of specific orectic energies, a doctrine of sublimation conceived as involving the directing of general energy through some one of the distinctive channels is justified by the evidence of conflict and the interaction of tendencies. The process of sublimation is demonstrated psychologically by instances of the development of an independent interest in what was originally a means to an end, and in the pursuit of a constituent phase of a complex train of instinctive activity. Further illustration of the origin of sublimated interests appears in the process of affective conditioning, and in certain cases of sentiment formation. It is because of the non-specificity of human instincts, a marked characteristic of the period of growth, that sublimation becomes possible at all. The sex instinct lends itself readily to such deflection.—*R. C. Strassburger* (St. Joseph's College for Women).

2664. Harriman, P. L. The experimental production of some phenomena related to the multiple personality. *J. abnorm. soc. Psychol.*, 1942, 37, 244-255.—This describes a procedure by means of which some of the phenomena usually termed manifestations of multiple personality can be produced experimentally. In a deep hypnotic trance, automatic writing is suggested to the subject, as well as amnesia for the suggestion itself. After he has written, he is awakened. The product of the automatic response means nothing to him in this state. A light trance is now induced, and the subject is told that he fully understands the whole experience. Upon awaking he is able to translate the cryptic material without hesitation. This apparent creation of different personalities seems to the writer akin to classic descriptions of multiple personality, and raises the possibility that certain of these cases may in reality be the result of implied suggestion given by the investigator.—*F. W. Finger* (Virginia).

2665. Kant, O. The technique of dream analysis. *J. abnorm. soc. Psychol.*, 1942, 37, 104-114.—A dream should be read rather than interpreted. It is important to perceive the dream with relaxed attention and to go over it time and again. The dream, being by no means a finished product, should be completed by the dreamer himself. The completed dream with its periphery of related pictures, gained by the supplementing associations of the dreamer, will always give a certain impression of atmosphere and of topic. Practically, it will not always be necessary to continue working through the material until the whole dream in all its details

can be read; occasionally the free associations starting off from a striking point of the dream will take the lead and offer so much revealing material that further pursuit of the original dream content is not needed.—C. H. Johnson (Portland, Ore.).

2666. Kant, O. Dreams of schizophrenic patients. *J. nerv. ment. Dis.*, 1942, 95, 335-347.—200 dreams of 12 schizophrenic patients are analyzed. The patients do not seem to dream less than normal individuals. No dreams appear specific to schizophrenia. Schizophrenics are apt to attach more meaning to their dream experiences than do other persons; they associate freely in continuation of their dream statements. The analysis of dreams in schizophrenia does not seem to hold much promise for diagnosis or therapy.—R. M. Stogdill (Ohio Bureau of Juvenile Research).

2667. Kennedy, J. L. Psychical belief. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 159-174.—This is a comparison of data obtained in 1913-1917 from 1095 Stanford University students, 240 of whom were restudied in 1938 and 1939, with those from 544 students tested in 1938 and 1939. The data are analyzed for differences in sex, education, and generation. The decrease in amount of belief in psychical means of communication is attributed to the increase in scientific knowledge and attitude.—G. S. Speer (Central YMCA College).

2668. Kielholz, A. Von den Träumen einer Blinden. (A blind woman's dreams.) *Mschr. Psychiat. Neurol.*, 1941, 104, 280-300.—The blackout has made the inner life of the blind more real to us, particularly the tendencies to increased introversion, guilt feelings, self-torture, and egoistic strivings or death phantasies. Kielholz reports the analysis of a woman who had had poor vision from childhood and became blind in adult life. Through dreams one may communicate with the blind as intimately as with the seeing and with as favorable therapeutic results. The patient attains a sense of reality, objectivity, and an active attitude, and through the transference he fulfills his greatest wish, to form, like a seeing person, a reciprocal rapport with the seeing on an equal basis. The present humble patient, Milton in his epics, and Swedenborg in his religious experiences, all utilized similar symbols and mechanisms due to the introversion resulting from defective vision.—M. E. Morse (Baltimore, Md.).

2669. Klüver, H. Mechanisms of hallucinations. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 175-207.—The author reviews theories and research in the discussion of the question as to whether there are hallucinatory constants. Hallucinations in eidetic imagery and various pathological conditions, and the effect of electric current and mescaline are considered. The hallucinatory constants described are also characteristic of other phenomena, and suggest some constancy in the underlying conditions.

Implications for psychiatric research are discussed.—G. S. Speer (Central YMCA College).

2670. Miller, J. G. **Unconsciousness**. New York: Wiley, 1942. Pp. vi + 329. \$3.00.—Many criteria have been used to define unconsciousness. 16 common meanings of the term are discussed and illustrated, and the experimental evidence relevant to them is briefly reviewed. These reviews cover conditioning to subliminal stimuli, learning without insight, the use of subliminal cues in perception, etc. The author concludes that, introspectively, all conscious behavior appears to possess in common the characteristic of awareness. However, the phenomena accompanied by this awareness are so diverse behaviorally that they should be studied as separate processes.—L. B. Heathers (Smith).

2671. Seguin, C. A. Contribución al estudio del hipnotismo. (Contribution to the study of hypnotism.) *Rev. Neuro-Psiquiat.*, Lima, 1941, 4, 357-462.—A detailed, documented survey of the history of hypnotism, the production and phenomenology of hypnosis, hypnosis in animals, and theories and applications is presented. The author reports his own study of the differences between hypnosis and normal sleep as a contribution to an affective theory of hypnosis. This point of view, advanced previously by Janet and others, represents a return to the essential position maintained by Charcot, apart from the latter's misinterpretations. The theory that hypnosis is in some sense pathological also finds support in recent depth psychology. Bibliography of 233 titles.—H. D. Spoerl (American International College).

2672. Wilkins, G. H., & Sherman, H. M. **Thoughts through space; a remarkable adventure in the realm of the mind**. New York: Creative Age Press, 1942. Pp. 421. \$4.50.—This book is a report upon a telepathic experiment made in connection with Sir Hubert Wilkins' search in the Arctic for the Russian aviators lost in a flight over the North Pole in August, 1937. The authors had pre-arranged that each day for a half-hour period at a certain hour Sir Hubert would concentrate upon the significant happenings of the day, while at the same time Sherman in New York would attempt to record any impressions about the expedition which came to his mind. Part 1 of the book, by Sir Hubert, consists of a narrative of the expedition, with selected instances of Sherman's telepathic descriptions being woven into the story. Part 2, by Sherman, is a subjective description of his rôle as receiver and a general discussion of the functioning of telepathy as he conceives it. Part 3 contains the full record of Sherman's impressions and of Sir Hubert's comments thereon and documents and affidavits bearing upon the bona fides of the results.—J. G. Pratt (Duke).

[See also abstract 2745.]

FUNCTIONAL DISORDERS

2673. Abel, T. M. Negro-white interpersonal relationships among institutionalized subnormal

girls. *Amer. J. ment. Def.*, 1942, 46, 325-339.—Negro girls over 14 showed marked aggressiveness toward white girls of equivalent intellectual status, had a strong sexual attraction for them, and became their leaders. Explanations of the reasons for such behavior are offered.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

2674. **Bromberg, W.** Some social aspects of the history of psychiatry. *Bull. Inst. Hist. Med.*, 1942, 11, 117-132.—Social, economic, and religious changes, and even wars, have been reflected in thought concerning mental diseases. In its early stages psychiatry developed as a series of concepts in response to emotional reactions rather than through intellectual interest. The main influences responsible for its growth were: the humanitarian movement starting in the 18th century, the spreading social consciousness beginning early in the 19th century, the intellectual upheaval due to the struggle between religion and science, and the emergence of the theory of evolution. These prepared the way for a dynamic psychiatry. The social force behind this upheaval was the powerful new upper class rising from the industrial revolution. The social forces nearest to the present are the limitation of colonial and trade expansion with the consequent shunting of the highest creative energy into science, the failure of religion in dealing with anxiety, and intense competition with resultant frustrations. We cannot foresee the effect of the impending military and political world realignment on the individual ego and on psychiatry because we are too deeply immersed in the struggle.—*M. E. Morse* (Baltimore, Md.).

2675. **Bryngelson, B.** Investigations in the etiology and nature of dysphemia and its symptom, stuttering. *J. Speech Disorders*, 1942, 7, 15-27.—"Dysphemia refers to an irregularity of neural integration in that portion of the central nervous system responsible for the flow of nerve impulses to the speech musculature." Stuttering is one of the primary symptoms of this disorder. The author summarizes some of the most important researches of the past 20 years which bear on the nature and etiology of dysphemia. He concludes that dysphemia is a serious pathologic state of an organism which may be a form of atavistic behavior. The constitutional differences between dysphemics and normal speakers are differences in kind and not in degree. 36 references.—*C. V. Hudgins* (Clarke School).

2676. **Carlson, A. J.** The alcohol problem: possible lines of useful research. *Quart. J. Stud. Alcohol*, 1942, 2, 672-676.—"If alcohol per se is a habit-forming drug, it is evidently so for only a small percentage of our population. What is peculiar or special in the personality make-up or in the social environment of these people that induces or permits this addiction?"—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2677. **Conn, J. H.** The aggressive female "psychopathic" personality. *J. nerv. ment. Dis.*, 1942, 95, 316-334.—The concept of psychopathic

personality is traced in the literature from the time of Pinel to the present. An attempt is made to isolate the characteristic factors in psychopathic personality in respect to stock, parent-child-sibling relationships, childhood experiences, later group adjustments, special assets, and attitudes to marriage.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2678. **Darling, I. A.** Inebriety: a classification. *Quart. J. Stud. Alcohol*, 1942, 2, 677-685.—A six-fold classification in which inebriates are arranged according to whether the alcoholism is associated with: (1) frank psychoneurosis or psychosis; (2) organic brain lesion; (3) mental deficiency; (4) effort to escape from a painful life situation, with the patient realizing alcohol as his escape; (5) effort to escape without such realization; or (6) with habit formation through custom, frequent repetition, and physiological craving.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2679. **Dent, J. Y.** The study and cure of inebriety. *Brit. J. Inebr.*, 1941, 39, 3-15.—[Abstracted review; original not seen.] In England attention has been concentrated on the control rather than the cure of inebriety. The conditioned reflex treatment of alcoholism is traced to Sweden about the year 1500.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2680. **Greene, J. S.** Functional speech and voice disorders. *J. nerv. ment. Dis.*, 1942, 95, 299-309.—Stuttering is a somatic manifestation of an emotional disorder involving the organism as a whole. There are certain characteristics so common to stutterers as a group that a definite syndromic picture may be drawn and a stutter type differentiated. Hereditary factors which predispose the individual to emotional instability are found in more than 50% of such cases. Therapy must be directed toward increasing the underlying efficiency of the organism itself and toward correcting unsound emotional reactions.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2681. **Hadden, S. B.** Treatment of the neuroses by class technic. *Ann. intern. Med.*, 1942, 16, 33-37.—Group psychotherapy has been used for centuries by religious and philosophical leaders (Christ, Confucius). Hadden describes his experiences with this method in classes (6-17 members) of neurotics in the outpatient department of a general hospital. The requirements for admission were intelligence, cooperation, and absence of particularly objectionable traits. This method affords a partial solution of the neurotic problem in large urban hospitals and might be equally valuable in war neuroses. It is also an effective method for combatting quacks and cults.—*M. E. Morse* (Baltimore, Md.).

2682. **Hobbs, G. E.** Mental disorder in one of a pair of identical twins. *Amer. J. Psychiat.*, 1941, 98, 447-450.—Data are given for making diagnosis of monozygotic origin of twins. In 5 cases meeting these requirements, one twin suffered from mental deficiency, mental depression, petit mal epilepsy,

grand mal seizures, and hysterical attacks simulating epilepsy. In 4 cases, differences in environment were determined which were important in the etiology; the continued mental health of the other twin rules out the possibility that heredity in itself was the factor behind the illness.—R. Goldman (Boston Psychopathic Hospital).

2683. Jacobson, E. The physiological conception and treatment of certain common "psychoneuroses." *Amer. J. Psychiat.*, 1941, 98, 219-226.—Most of the disorders commonly called neurotic or psycho-neurotic are, in physiological terms, "forms and effects of neuromuscular hypertension complicated by pathological habit formation." Any visceral system or organ may evince the hypertensive symptoms. Treatment can be accomplished effectively if progressive relaxation is employed. The physiological method includes general as well as differential relaxation in which the patient is taught to recognize and to relax minute as well as gross tensions, constant or fleeting. Objective records of progress are furnished by electrical measurements of neuromuscular tension before, during, and after treatment.—R. Goldman (Boston Psychopathic Hospital).

2684. Kenyon, E. L. The etiology of stammering; fundamentally a wrong psychophysiologic habit in the control of the vocal cords for the production of an individual speech sound; a beginning presentation. *Illinois med. J.*, 1942, 81, 232-238.—Speech is based on thought in terms of elementary speech sounds and voluntary control of breathing, modified by articulative and palatal acts. The child gradually builds up habits for controlling the entire vocal machine. Some children, however, before normal speech becomes firmly fixed, produce vocal cord adduction, either through accident or emotion, thus preventing voice production. The act may be deliberately repeated through interest, or it may be forgotten. The simultaneous development of 2 psychophysiological habits leads to conflict. The child aims at normal speech but through self-consciousness is compelled to focus attention on stammering. The habit is not subjectively harmful until the child realizes how seriously it is regarded by others and its effects on his life. Through a new method of enabling the stammerer to fix attention on controlled normal speech production the habit can be overcome in all children between 8 and 12. After 13 years the outlook is less favorable owing to the development of psychological complications.—M. E. Morse (Baltimore, Md.).

2685. Kisker, G. W. A projective approach to personality patterns during insulin-shock and metrazol-convulsive therapy. *J. abnorm. soc. Psychol.*, 1942, 37, 120-124.—The present findings indicate a considerable shift in the several Rorschach signs from one examination to another, both in psychiatric cases and in control subjects. The response differences in the psychotic series indicate changes within the individual psychotic framework, rather than changes in the direction of normal patterns. Certain elements of the psychotic pattern apparently are

little affected by the therapy despite clinical improvement. Thus, it might be questioned whether pharmacological shock therapy brings about any deep restructuralization of the personality pattern or its underlying dynamisms.—C. H. Johnson (Portland, Ore.).

2686. Kisker, G. W., & Knox, G. W. Gestalt dynamics and psychopathology. *J. nerv. ment. Dis.*, 1942, 95, 474-478.—3 Gestalt principles, the law of dynamic direction, isomorphism, and the reflex loop, are applied to several problems in abnormal psychology. In terms of Gestalt dynamics there really is never any abnormality. The brain states and experiences tend to deviate toward end states. Under excessive constraining or disturbing conditions, the brain field and the correlated mental life can more adequately reach their end state by neglecting or shielding themselves from the effects of the external world mediated through the sensory system. Hallucinations and delusions may be end states in this process.—R. M. Stogdill (Ohio Bureau of Juvenile Research).

2687. Korzybski, A. General semantics, psychiatry, psychotherapy and prevention. *Amer. J. Psychiat.*, 1941, 98, 203-214.—"General medicine without psychiatry and psychosomatic considerations represents little more than glorified veterinary science." The main aim of general semantics with its extensional methods is educational, re-educational, and preventive. Governments "should officially employ experts in neuropsychiatry, anthropology and general semantics to guide mankind toward sanity."—R. Goldman (Boston Psychopathic Hospital).

2688. Lowry, J. V., & Ebaugh, F. G. A post-repeal study of 300 chronic alcoholics. *Amer. J. med. Sci.*, 1942, 203, 120-124.—In the 6 years following repeal (1933) the average number of admissions per year for chronic alcoholism at the Colorado Psychopathic Hospital was 147% higher than the average for the 2 years preceding repeal. The New York State Hospitals had a similar experience. Only a few of the Colorado patients seriously wished to be cured. One-third were psychotic. Chronic alcoholism began before the age of 30 in most of the cases. Many were reared in family situations complicated by alcoholic or otherwise inadequate relatives and showed poor emotional reactions during childhood. Only 10% had made good adult economic and marital adjustments. Only 6% had a good prognosis at discharge. As far as could be determined, 20% remained sober for a minimum of 6 months after discharge, 30% returned to their pre-hospitalization status, and no information was available on the remainder.—M. E. Morse (Baltimore, Md.).

2689. Marshall, H. The clinical interpretation of markedly divergent performance on repeated tests, form L and form M, Stanford-Binet; a case study. *Amer. J. ment. Def.*, 1942, 46, 351-353.—"An extremely maladjusted boy had been labelled feeble-minded on the basis of what subsequently proved to

be an incomplete test. This diagnosis resulted in his being allowed to mark time in academic work. A later test showed his ability to be approximately that of the 'low normal' group, with marked unevenness. When treated accordingly and held to standards of achievement at this level, he showed improvement, both socially and educationally."—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2690. *McNeel, B. H., Dewan, J. G., Myers, C. R., Proctor, L. D., & Goodwin, J. E.* Parallel psychological, psychiatric and physiological findings in schizophrenic patients under insulin shock treatment. *Amer. J. Psychiat.*, 1941, 98, 422-429.—The test scores of a large battery were converted into decile scores based on all available test records for schizophrenics of all types and degrees of illness. The psychiatric picture was evaluated under 54 headings. The physiological ratings were the basal oxygen consumption rates. Electroencephalograms were taken routinely on all patients. 8 cases are presented graphically. As the psychiatric rating approaches the normal so does the psychometric rating as well as the basal metabolic rate. "The psychometric and psychiatric ratings show better correlation than the basal metabolic rate."—*R. Goldman* (Boston Psychopathic Hospital).

2691. *Needles, W.* Concerning transfer of cerebral dominance in the function of speech. *J. nerv. ment. Dis.*, 1942, 95, 270-277.—4 cases were studied in which the following common factors were present: loss of function in the right hand, adoption of function by the left hand, and the onset of aphasia at a later date. In 2 cases the aphasia was provoked by a lesion in the right hemisphere and in 2 by a lesion in the left. The explanation proposed is that the function of speech is not relinquished by one hemisphere and taken up by the other as the shift from the use of one hand to that of the other occurs, but continues rather to be participated in by both hemispheres.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2692. *Owens, W. A., & Grimm, W.* A note regarding exceptional musical ability in a low-grade imbecile. *J. educ. Psychol.*, 1941, 32, 636-637.—This is a case study of a 22-year old imbecile who has been in an institution since she was 14. She cannot do any useful work but can play by ear any musical composition that is hummed to her.—*J. W. Macmillan* (Maryland).

2693. *Patterson, R. M., & Zeigler, T. W.* Ordinal position and schizophrenia. *Amer. J. Psychiat.*, 1941, 98, 455-458.—Histories, satisfactory for study purposes, were available on 422 cases; controls were 195 cases of admission to a general hospital, chosen at random. Sibling position seems to play no important part in the development of schizophrenia.—*R. Goldman* (Boston Psychopathic Hospital).

2694. *Penrose, L. S., & Myers, C. R.* A method for the preliminary psychiatric "screening" of large groups. *Amer. J. Psychiat.*, 1941, 98, 238-242. A standard group intelligence test (General Examination-M) consisting of 12 subtests (4 pictorial) and

a vocabulary test were given to enlisted men in the armed forces, to 140 psychotic, and to 34 psycho-neurotic subjects. Psychotic subjects showed a distinctive pattern of subtest scores. The neurotic group displayed a subtest pattern similar to but less marked than that shown by psychotic subjects.—*R. Goldman* (Boston Psychopathic Hospital).

2695. *Penrose, L. S., & Wilson, D. J.* The spatial dispersion of psychotic responses in the tapping test. *J. abnorm. soc. Psychol.*, 1942, 37, 131-133.—Psychotic subjects make poorer total scores than the normal, not only because their maximal speeds may be slower but also on account of capricious variation in speed. When they were allowed freedom of self-expression provided by the simple board and style, they frequently wasted time by drawing patterns or "doodles." The normal did not organize the dots into any pattern but showed a variable degree of random scattering around focal points.—*C. H. Johnson* (Portland, Ore.).

2696. *Quercy, —, & Bayle, —.* Les fondateurs de la doctrine française de l'aphasie. (The founders of the French doctrine of aphasia.) *Ann. méd.-psychol.*, 1940, 98, 297-310.—This is an historical article giving the theories of Lordat who preceded Broca. Lordat found cases in which the patients were apparently not amnesic or paralytic but still could not talk. He described this condition as lack in "vital memory" or as a suspension of acquired synergies.—*M. B. Mitchell* (Minnesota).

2697. *Rabin, A. I.* Differentiating psychometric patterns in schizophrenia and manic-depressive psychosis. *J. abnorm. soc. Psychol.*, 1942, 37, 270-272.—The Wechsler-Bellevue Intelligence Scales were given to 76 schizophrenics, 25 manic-depressives, and 92 normal student nurses. The psychotics scored best in information tests, and lowest in "Digit Symbols" (requiring new associations). The schizophrenic group had higher verbal than performance IQ's; the manic picture is significantly the reverse. An index utilizing the ratio between scores on the tests in which the schizophrenics did best and those in which they scored lowest, serves to distinguish clearly among the 3 groups. This index may be of value in resolving borderline diagnostic problems.—*F. W. Finger* (Virginia).

2698. *Ramsay, H. H.* Syphilis as a cause of mental disease and mental defect. *Amer. J. ment. Def.*, 1942, 46, 310-311.—Syphilis is not as important a causative factor as is usually supposed. Woodall's study showed that 6.5% of institutionalized feeble-minded were congenitally syphilitic, and Vedder found 17.4% of the insane so affected. Defective heredity was present in 16% of Woodall's cases. The blunted moral senses of defectives and unstable individuals lead to sexual promiscuity and infection. Thus, where syphilis might erroneously be credited as the cause of the defect, it is rather the hereditary defect that precedes the infection which is the cause.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2699. *Reilly, W. N.* Let the parent live again. *Amer. J. ment. Def.*, 1942, 46, 409-413.—The Chil-

dren's Benevolent League of the state of Washington rehabilitates parents of defective children by building up their morale. Member-parents soon cease to be unsocial. They are encouraged to work toward improving state schools.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2700. **Repond, A.** *Le latah: une psycho-névrose exotique.* (Latah: an exotic psychoneurosis.) *Ann. méd.-psychol.*, 1940, **98**, 311-324.—Natives in subservient positions in Java and Arabs living in Africa sometimes develop a neurosis in which they imitate quick movements and speech, usually of their masters. Instead of obeying instructions, they merely repeat them. Latah differs from hysteria found in occidental countries in that the patient shows great resistance and anguish and often becomes very angry when he feels compelled to imitate. It differs from catatonia in the good contact the patient has with his environment. While the natives tend to worship psychotics in general, they make fun of latah sufferers. Latah seems to be a very personal relationship; the symptoms can be evoked in only one patient at a time, and a patient will imitate only one person at a time. (See also XVI: 1957.)—*M. B. Mitchell* (Minnesota).

2701. **Richards, E. L.** *Introduction to psychobiology and psychiatry; a textbook for nurses.* St. Louis: Mosby, 1941. Pp. 357. \$2.50.—This book presents the viewpoint of the Henry Phipps Psychiatric Clinic. Both the usual terminology for mental diseases and that developed by Adolf Meyer are employed. Numerous case histories are given, and therapy is discussed.—*M. E. Morse* (Baltimore, Md.).

2702. **Rolleston, J. D.** *The folk-lore of alcoholism.* *Brit. J. Inebr.*, 1942, **39**, 30-36.—[Abstracted review; original not seen.] Alcoholism is a popular subject; only money and sex have more slang synonyms. Numbers of old treatments of alcoholism are reviewed.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2703. **Russell, W. I.** *A psychopathic department of an American general hospital in 1808.* *Amer. J. Psychiat.*, 1941, **98**, 229-237.—*R. Goldman* (Boston Psychopathic Hospital).

2704. **Schneider, K.** *Die psychopathischen Persönlichkeiten.* (The psychopathic personalities.) (4th ed.) Vienna: Franz Deuticke, 1940. Pp. 124. RM. 5.—[Abstracted review; original not seen.] Changes from the 3rd edition (see VIII: 5073) include: Material on general deviations has been omitted; variable moods and insecurity are presented in a new and different way; the bibliography has been brought up to date.—*H. D. Spoerl* (American International College).

2705. **Schweitzer, M. D.** *The challenge of mental deficiency to genetics.* *Amer. J. ment. Def.*, 1942, **46**, 295-297.—As a guiding principle in genetic thought the concept of heredity as a limiting factor has outlived its usefulness. In terms of genetic research, mental deficiency needs the same type of epidemiological study which is being devoted to

communicable and familial diseases. Detailed information is wanted about the exact nature of the participation of heredity and the particular points at which its rôle becomes evident.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2706. **Sherman, I., Mergener, J., & Levitin, D.** *The effect of convulsive treatment on memory.* *Amer. J. Psychiat.*, 1941, **98**, 401-403.—9 schizophrenic and 1 manic-depressive were given a series of 6 tests before, during, and after electrically or chemically induced seizures. There was no significant effect upon immediate or recent memory as measured by the tests employed.—*R. Goldman* (Boston Psychopathic Hospital).

2707. **Shohara, H. H.** *A contribution to the genesis of speech movements and the etiology of stuttering.* *J. Speech Disorders*, 1942, **7**, 29-32.—This paper presupposes that consonants originate as modifications of swallowing, sucking, and chewing reflexes. Since articulatory movements occur in speech exclusively during the expiratory process, it is obvious that consonant movements originating with the vegetative reflexes must become synchronized with the expiratory reflex. The author attempts to show how this synchrony develops in normal infants, and also how it is possible, and even likely, that such synchronization may fail to develop in premature infants, and in those weakened by disease. Breathing disturbances result from a failure of this synchronization, leading to stuttering.—*C. V. Hudgins* (Clarke School).

2708. **Skeels, H. M.** *A study of the effects of differential stimulation on mentally retarded children; a follow-up report.* *Amer. J. ment. Def.*, 1942, **46**, 340-350.—By the end of the experimental period (see XIV: 1422 for original study) "the level of intelligence of the experimental group had increased markedly, while that of the contrast group showed an equivalent loss. 11 of the 13 experimental children attained normal or above average intelligence, and were placed in adoptive homes. Examined 2.5 years later, these children had maintained and augmented the earlier gains in intelligence. Follow-up study of children in the contrast group, although showing a slight mean gain, indicated that the marked degree of mental retardation had been maintained with some variation. A change from marked mental retardation to normal intelligence in children of preschool age is possible in the absence of organic disease or clinical deficiency by providing a more adequate psychological prescription. Conversely, children of normal intelligence may become mentally retarded to such a degree as to require permanent institutionalization under the continued adverse influence of a non-stimulating environment." Tables show test data and statistics.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2709. **Skeen, D. A.** *The progress of the mental health movement in Utah.* *Amer. J. ment. Def.*, 1942, **46**, 363-367.—Prior to the establishment in 1926 of the Utah Society for Mental Hygiene state institutions there gave little consideration to indi-

vidual needs of inmates. Subsequently a modern state training school for mental defectives was established. Its out-patient clinic began work in 1934, and a program of selective sterilization was set up in 1935.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2710. **Stevenson, R. W.** *Absenteeism in an industrial plant due to alcoholism.* *Quart. J. Stud. Alcohol*, 1942, 2, 661-668.—During one year, of 14,497 men employees of a steel mill, 322, or 2.63%, were absent from work because of drinking. Of these, 46 were discharged after a fourth offense. Generally the older employees and the less educated are disciplined.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2711. **Thom, D. A.** *War neuroses.* *New Engl. J. Med.*, 1941, 225, 864-867.—The problem of war neuroses is considered in relation to the 3 outstanding phases of the soldier's military experience: mobilization, combat service, and demobilization. The importance of careful selection, adequate treatment, and rehabilitation during demobilization is emphasized.—*M. Keller* (Butler Hospital).

2712. **Voegtlin, W. L., & Lemere, F.** *The treatment of alcohol addiction: a review of the literature.* *Quart. J. Stud. Alcohol*, 1942, 2, 717-803.—Psychological methods of treatment include: compulsory and punitive measures, generally effective with only 15-35%; psychosocial therapy; religious appeal, as exemplified in Alcoholics Anonymous, successful apparently in 30-70%; conventional psychotherapy in a controlled environment, such as farm or institution, giving 25-75% of cures, with adequate therapy including 20-100 hours of treatment; psychoanalysis, which so far has a lack of encouraging results; and hypnosis, for which there are no encouraging statistics. Physiological methods include conditioned reflex therapy, which with proper application gives 60-70% of cures; elevation of blood sugar levels; spinal drainage; convulsive therapy; serotherapy; and autohemotherapy. Pharmacological methods are reviewed and adjuvant methods mentioned. 239-item bibliography.—*W. L. Wilkins* (U. S. Marine Corps Base, San Diego, Calif.).

2713. **Wile, I. S.** *Mental hygiene and social security.* *Med. Rec.*, N. Y., 1942, 155, 235-238.—A general discussion is offered on mental hygiene, personal and social morale, and social security as problems of communal and personal importance particularly at the present time and during the future postwar period. Of primary importance in maintaining communal stability is the protection of the individual as such but without sacrificing the community for the benefit of neurotic persons who, especially in wartime, demand to serve the community despite their constitutional unfitness. The most important task is that of making every individual aware of the variety of problems of adjustment that the community must face.—*M. H. Erickson* (Eloise Hospital).

2714. **Willhite, F. V.** *Program for the social control of the mentally deficient.* *Amer. J. ment.*

Def., 1942, 46, 404-408.—The way in which the South Dakota Control Law works out is explained. After 12 years of pioneering the law has demonstrated its effectiveness.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2715. **Zubin, J., & Thompson, J.** *Sorting tests in relation to drug therapy in schizophrenia.* New York: New York State Psychiatric Institute, 1941. Pp. 23.—The Weigl Color-Form Test, the Vigotsky Test of Concept Formation, and the BRL Sorting Test were administered to 92 schizophrenic patients who received drug therapy. Of this group 49 were given insulin therapy; 29, metrazol therapy; and 14, a combination of both treatments. Among other findings the results show a significant relationship between test scores and subsequent improvement, for the insulin group at least. A theoretical discussion is included, and the tests employed are described in detail in an appendix.—*M. Keller* (Butler Hospital).

[See also abstracts 2550, 2558, 2565, 2570, 2577, 2666, 2668, 2790, 2794, 2803, 2810, 2848, 2849, 2856, 2925.]

PERSONALITY AND CHARACTER

2716. **Baker, H. J.** *Detroit adjustment inventory. Alpha form.* Bloomington, Ill.: Public School Publishing Co., 1942. \$1.75 per 25; specimen set, 35¢.—This self-administering inventory, designed to interpret the problems of junior and senior high school students, carries the heading "Telling what I do." It offers 120 items dealing with 24 "problem situations," e.g. health, fears, optimism-pessimism, growing-up, friends. For each item there are 5 statements in the first person, of which the pupil indicates the one that most nearly fits him. Individual record blanks facilitate the teacher's calculation of weighted scores. The handbook recommends the use of the inventory both for individual diagnosis and as a basis for supervised discussion in courses on the psychology of everyday living. During 3 years of use in the Detroit Psychological Clinic, 3000 cases have been tested. Significant differences were found between scores of 61 behavior and 27 non-behavior cases. 25 separate sheets of remedial suggestions are available, so that a pupil may be given specific aid appropriate to his special problems as located by the test.—*E. B. Mallory* (Wellesley).

2717. **Baldwin, A. L.** *Personal structure analysis: a statistical method for investigating the single personality.* *J. abnorm. soc. Psychol.*, 1942, 37, 163-183.—This report demonstrates the use of a method of personality diagnosis involving the statistical analysis of such data as personal correspondence. The case material is divided into incidents, which are then classified according to object discussed and attitude expressed. With the assumptions that frequency is an index of importance of the item, and contiguity of 2 items an indication of their relationship, the structure of the personality pattern is described. The validity of the method (based on

agreement with clinical judgments of the original material) is good. The technique is time-consuming and requires a great deal of material, but it allows a quantitative and objective clinical interpretation of the single case.—*F. W. Finger* (Virginia).

2718. **Beck, S. J.** *Error, symbol, and method in the Rorschach test.* *J. abnorm. soc. Psychol.*, 1942, 37, 83-103.—Rorschach test procedures are liable to errors on several grounds: (1) need of definitions, since neither the personality as a whole nor the component factors are being validated by stable frames of reference; (2) inadequate clinical experience of the investigators; (3) failure to control by the usual scientific techniques the method for identifying the separate Rorschach factors out of which the entire personality structure is patterned; (4) halo, which results from the examiner's direct contact with the subject whom he is examining. Rorschach findings for any one individual can be restated in the neurological concepts of Jackson, the psychological concepts of Freud, or the topological concepts of Lewin.—*C. H. Johnson* (Portland, Ore.).

2719. **Bender, J. F.** *The stuttering personality.* *Amer. J. Orthopsychiat.*, 1942, 12, 140-147.—A study of college male stutters revealed that they differ significantly and characteristically from comparable post-pubertal male non-stutterers in regard to morphology and mental capacity. A theory of the stuttering personality is presented.—*R. E. Perl* (Jewish Board of Guardians).

2720. **Benge, E. J.** *A self-rating scale for leadership qualifications. Part I.* Deep River, Conn.: National Foremen's Institute, 1942. \$0.25.—This is a scale on which an individual identifies himself with 1 of 6 characterizations in each of 20 situations. From the scores that have been assigned to the characterizations it is then possible to construct a quantitative profile of one's self-evaluation on 20 traits.—*N. R. Bartlett* (Brown).

2721. **Binder, H.** *Die uneheliche Mutterschaft.* (Illicit motherhood.) Bern: Huber, 1941. Pp. 378. Fr. 18.—[Abstracted review; original not seen.] This is a detailed and comprehensive study of the mental condition, personality characteristics, hereditary and social background, social adjustment, and family relationships of 350 unmarried mothers. The relationship of the mother to her child is usually one of antagonism and rejection.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2722. **Bircher, E.** *Arzt und Soldat; eine psychologische Betrachtung.* (Physician and soldier; a psychological consideration.) (2nd, rev. ed.) Stuttgart: Enke, 1941. Pp. 64. RM. 3.60.—See XV: 3883.—*H. L. Ansbacher* (Brown).

2723. **Brosin, H. W., & Fromm, E.** *Some principles of Gestalt psychology in the Rorschach experiment.* *Rorschach Res. Exch.*, 1942, 6, 1-15.—Gestalt psychology offers the most fruitful suggestions for the understanding of the nature of the correspondence between Rorschach responses and the personality of the subject. "The principle of

Praegnanz together with the concept of entropy is of invaluable aid in interpretation and scoring. . . . Gestalt experimentation opens the way for Rorschach investigation of the physiological processes underlying perception." Gestalt theory also helps in interpretation in the field of organic brain cases. The Gestalt expositions of "and" phenomena as contrasted with organic wholes, and of the nature of visual organization behind the retina enable students of Rorschach to gain a richer background for the understanding of a protocol.—*R. E. Horowitz* (New York City).

2724. **DuBois, C., & Oberholzer, E.** *Rorschach tests and native personality in Alor, Dutch East Indies.* *Trans. N. Y. Acad. Sci.*, 1942, 4, 168-170.—The Rorschach responses of the Alorese differ from the typical responses of the normal European or American in their lack of movement answers and form color reactions. Certain specific Alorese responses are found elsewhere only in certain pathological states of mind, especially in the defective states of the traumatic constitution. It is inferred from these data that "the personality and emotional character of the Alorese are very different from normal Europeans and Americans," and observation bears this supposition out.—*F. W. Finger* (Virginia).

2725. **Fay, P. J., & Middleton, W. C.** *Judgment of introversion from the transcribed voice.* *Quart. J. Speech*, 1942, 28, 226-228.—155 listeners were unable to judge introversion, as measured by Bernreuter scores, with better than chance expectation.—*W. H. Wilke* (New York University).

2726. **Flemming, E. G.** *The "halo" around "personality."* *Teach. Coll. Rec.*, 1942, 43, 564-569.—Teachers of the Horace Mann School in New York rated 84 girls for personality, using a 46-item list of descriptive terms. All items correlated positively with the general term "personality." A factor analysis of item intercorrelations yielded 4 factors.—*L. Birdsall* (Coll. Ent. Exam. Board).

2727. **Goodenough, F. L.** *The use of free association in the objective measurement of personality.* In *McNemar, Q., & Merrill, M. A., Studies in personality.* New York: McGraw-Hill, 1942. Pp. 87-103.—The author reports the development of a free association technique for the measurement of masculinity or femininity as a group test. The technique differs from others in the use of homonyms as stimulus words, and the categorizing of responses into groups on the basis of common characteristics of meaning empirically determined to have unequal appeal for individuals differing in respect to the trait measured. The test is disguised as a simple speed test, it can be effectively utilized in large scale explorations, it can be scored with a high degree of accuracy, and it retains the advantages of free expression without loss of objectivity in scoring and interpretation.—*G. S. Speer* (Central YMCA College).

2728. **Hartmann, W.** *Richelieu; eine psychologische Studie.* (Richelieu; a psychological study.)

Berlin: Junker & Dünnhaupt, 1940. RM. 2.70.—[Abstracted review; original not seen.] Richelieu is interpreted according to Jaensch; he was a genius of the S_2 type.—*H. D. Spoerl* (American International College).

2729. **Hertz, M. R.** *The scoring of the Rorschach ink-blot method as developed by the Brush Foundation.* *Rorschach Res. Exch.*, 1942, 6, 16-27.—Results of a decade of study with adolescent groups by the Brush Foundation are presented in table form. The scoring differs little from that of Beck and Klopfer. No differentiation is made between first and second degree normal or rarer details; a factor g , similar to Beck's z , is used to indicate degree of synthetic ability displayed; and categories labelled F undifferentiated, F primary, and $\%$ control are used to give a measure of the control element in the whole test. Percentage charts for computing Rorschach scores, available at the Brush Foundation, are described.—*R. E. Horowitz* (New York City).

2730. **Hosmer, J. S.** *Traits predictive of the successful outcome of unmarried mothers' plans to keep their children.* *Smith Coll. Stud. soc. Work*, 1942, 12, 263-301.—This is a follow-up study of 26 unmarried mothers, 6 years after the birth of their children. 5 factors were found to have some positive relationship to later adjustment: age at time of pregnancy; home conditions; personal adjustment; attitude toward pregnancy; attitude toward the child. No mother whose plans worked out well or fair had less than one of these traits favorable to adjustment.—*K. S. Yum* (Chicago).

2731. **Jacoby, H. J.** *Self-knowledge through handwriting.* New York; London: Wm. Salloch; J. M. Dent, 1941. Pp. xv + 71 + 228 illustrations. \$2.75.—This book is addressed, not to the professional graphologist, but to those whose "object is rather self-knowledge and a deeper insight into the minds of others through a silent contemplation of handwriting, whereby they dimly sense what may be called its soul." With the aid of some 150 examples of handwriting and numerous photographs of many kinds, the author discusses and analyzes various tendencies in handwriting from the point of view of writing as expressional movement. The symbolic significance of expressional movement is emphasized. There is no index. Bibliography of 13 titles.—*E. M. L. Burchard* (Temple).

2732. **Kelly, E. L.** *Personality as related to source and adequacy of sex instruction.* In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 147-158.—As part of a genetic study of psychological factors underlying marital compatibility, data were collected from 300 couples ranging in age from 18 to 50. Two questions related to source and adequacy of sex instruction. It is concluded that variations in source or adequacy of instruction is of little importance as a determinant of personality as rated in this study. It is not concluded that type or

amount of sex education are unrelated to personality development, however, and the implications of the study are discussed in relation to methodology and theory of future research.—*G. S. Speer* (Central YMCA College).

2733. **McCall, W. A., & Herring, J. P.** *My personality growth book for junior and senior high schools, colleges, and adult groups.* New York: Bureau of Publications, Teachers College, Columbia Univ., 1941. \$8.00 per 100; manual, \$0.20; specimen set, \$0.30.—This is a comprehensive personality test or rating scale, the chief purpose of which is "to provide means for the measurement, diagnosis, and improvement of personality in young persons and adults. The test, which deals with everyday experiences of normal people, is intended primarily to be used as a teaching instrument." The test consists of 160 items, 20 under each of the following headings: personal appearance, popularity, self-confidence, happiness, friendliness, conversational ability, responsibility, and democratic attitude. Each item is to be rated for a given individual, either by himself or another person, on a 9-point scale. Personality graphs are constructed both from the self-ratings and from the other-ratings. The following topics are discussed in the 18-page manual: purpose; features; intensive improvement of individuals; improvement of all members of a class, school system, college, etc.; improvement of teaching and curriculum; selection of teachers; survey by selected items; conduct of surveys and researches; validity; objectivity; and reliability. A list of 15 "books for growth and guiding growth" is appended.—*L. M. McCabe* (Cambridge, Mass.).

2734. **Miles, C. C.** *Psychological study of a young adult male pseudohermaphrodite reared as a female.* In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 209-227.—Descriptive and clinical account of a male thought to be a female and reared as one.—*G. S. Speer* (Central YMCA College).

2735. **Newton, R.** *How to improve your personality.* New York: McGraw-Hill, 1942. Pp. xvi + 205. \$1.75.—This book is intended as a textbook and, in part, as a workbook in personality improvement, but may be used by counselors and by individuals interested in self-improvement. The material is developed around the following points: (1) realization of need, (2) motivation, (3) self-analysis or stocktaking, and (4) systematic plans for improvement. The 10 chapters deal with importance of personality, what it is, how it may be classified, kind of personality people like, steps in improving personality, inventorying it, a plan for improving it, improving appearance and grooming, overcoming fear and stage fright, and encouragement to the reader to make a start. The inventory chapter includes objective devices for evaluating the reader's personality with respect to physical characteristics, personal habits, recreational and social versatility, reading habits, extent of general information, dominance-submissiveness, and introversion-extro-

version. The bibliography includes 108 books (starred as to relative importance), 34 articles, and 18 personality tests and scales, with a brief description of each.—*M. O. Wilson* (Oklahoma).

2736. Pârvu, N. *Metoda evaluării aplicată la cursul superior al liceului*. (The method of rating applied in the upper grades of the lyceum.) *Rev. Psihol.*, 1940, 3.—[Abstracted review; original not seen.] 5 students rated their colleagues on 12 personality traits, selected on the basis of the criteria of depth, generality, consistency, and specificity. 5 student raters are sufficient since the coefficients of correlation between the ratings of the entire class and of those 5 is high. The formula of Spearman-Brown was used to determine internal validity. The general conclusion is that intelligence and perseverance are the best-rated traits.—*S. M. Strong* (Minnesota).

2737. Rethlingshafer, D. *Relationship of tests of persistence to other measures of continuance of activities*. *J. abnorm. soc. Psychol.*, 1942, 37, 71-82.—An analysis of 29 tests selected as measuring some form of behavior that might be called tendency-to-continue substantiated Thornton's finding that tests of persistence do not all measure the same thing. Even as the factors "the habit of finishing whatever is started," endurance, and strength are probably basic to the trait of persistence, so there was also found a factor which could be placed under the broad term of perseveration. In measuring the habit of persistence it is difficult to keep any test free from the influence of intelligence. Two of the factors, called radical-conservative and natural tempo, were based on somewhat limited evidence.—*C. H. Johnson* (Portland, Ore.).

2738. Rice, E., & Sylvester, R. H. *Standards for research in personality*. *Proc. Ia Acad. Sci.*, 1941, 48, 396-397.—Abstract.

2739. Rosca, A. *Valoarea autoevaluării*. (The value of self-evaluation.) *Rev. Psihol.*, 1940, 3, 33-41.—[Abstracted review; original not seen.] 114 students and faculty members, 24 of whom were females, rated themselves on: manual dexterity, visual memory, attention, capacity to observe, and intelligence. They were also given tests on these traits. The self-rating scale and test results were correlated. Self-rating was found of some value for manual dexterity and attention, of little value for observation and memory, and of no value for intelligence. Both females and males, but especially the latter, overrated themselves. Those with superior aptitudes tended to underrate them, those with inferior aptitudes, to overrate them.—*S. M. Strong* (Minnesota).

2740. Rosenzweig, S. *Fantasy in personality and its study by test procedures*. *J. abnorm. soc. Psychol.*, 1942, 37, 40-51.—The characteristics of fantasy are its infantile origin, its inhibition by education and its subsequent unconsciousness, its disregard of logic and reason, its concrete pictorial quality, and its determinism. Consideration is given to the following selective procedures for studying

personality by educated fantasies: word association, Rorschach ink blots, play technique, thematic apperception, and the tautophone. These projective methods are in the spirit of some of the most recent tendencies of modern scientific work and are highly proved against the subject's ability to conceal or deliberately modify the facts about himself. Considerable skill is involved in the interpretation of the data obtained, which represents a serious limitation. In uncritical hands the invocation of fantasy to explain behavior can become so far-fetched as to be itself fantastic.—*C. H. Johnson* (Portland, Ore.).

2741. Rotter, J. B., & Rodnick, E. H. *A study of the reactions to experimentally induced frustration*. *Proc. Ind. Acad. Sci.*, 1941, 50, 192.—Abstract.

2742. Ruch, F. L. *A technique for detecting attempts to fake performance on the self-inventory type of personality test*. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 229-234.—College students were found to be able to influence markedly their scores on the Bernreuter Personality Inventory. By comparing responses under two conditions, the author has developed an honesty scale which may be applied to the Bernreuter responses, and has established critical scores to detect deception.—*G. S. Speer* (Central YMCA College).

2743. Wile, I. S. *Chance in the validation of personality tests*. *Amer. J. Orthopsychiat.*, 1942, 12, 154-161.—The chance selection of playing cards as a means of gathering data about intelligence, emotionality and health, aggressive and submissive trends, and the like gives as true a picture of the personality as do many well-known theories and objective tests. Diagnostic statements derived from several methods of personality study were checked against the case records of 100 clinic children in the same manner as were the statements derived from the raw chance card test. The percentage of right statements derived from the chance test was as high or higher than the results attained by examiners employing the several methods said to possess true diagnostic value.—*R. E. Perl* (Jewish Board of Guardians).

2744. Zapan, G. *Sistemizare in teoria temperamenteelor*. (Systematization in the theory of temperaments.) *Rev. Pedag., Bucureşti*, 1939, 10, 154-173.—[Abstracted review; original not seen.] The individual rates on a 6-point continuum the degree of manifestation of his temperament determinants: motor activity, speed of motor reaction, persistency at work, emotionality, direction of emotional manifestation (prompt reaction to the environment or inhibition), attitude towards the world and existence (optimism or pessimism), memory, imagination, communicability or withholding of thoughts. From a study of 2850 cases, the following temperament distribution of the Roumanian people was arrived at: choleric, 30%; sentimental, 25%; nervous, 12%; phlegmatic, 10%; passionate, 8%; apathetic, 7%; sanguine, 6%; and amorphous, 2%. It is possible to determine temperament at different

ages, temperament of the sexes, temperament and aptitudes in the learning process, temperament and profession, etc.—*S. M. Strong* (Minnesota).

[See also abstracts 2547, 2608, 2633, 2639, 2640, 2664, 2677, 2734, 2744, 2757, 2759, 2761, 2789, 2796, 2814, 2819, 2871.]

GENERAL SOCIAL PROCESSES (incl. Esthetics)

2745. **Andrade, V. Freud, testigo y acusador del mundo contemporáneo.** (Freud, witness and accuser of the contemporary world.) *Rev. javer.*, Bogotá, 1942, 17, 33-39.—Like his sociological precursor Marx, Freud achieved the distinction of rendering an accurate portrayal of materialistic, egoistic, present-day man. Freud's observations and demonstrations are perhaps scientifically correct. His formulations fit the kind of person he described. The notion that Christian morality and the doctrine of free will produced this state of affairs, however, is a reversed conclusion. The veracity of Freud's observations is in proportion to the falling away from faith on the part of mankind. "For anyone who has not read St. Paul and Bossuet's treatise on concupiscence, Freud is a find."—*H. D. Spoerl* (American International College).

2746. **Angell, E. The civilian morale agency.** *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 160-167.—There are hundreds of civilian morale agencies in the U. S. These private propaganda offices occur during a time of rapid social change and render valuable service to democratic society—as, for example, in furthering the American defense effort. Some pitfalls of such private propagandas are: indulging in negative denunciation, identification with a particular economic system, and setting one group of the population against another. Despite such drawbacks their services have outweighed their mistakes. An even more important future may be predicted for these agencies, though some coordination, informal or otherwise, may occur.—*S. S. Sargent* (Barnard).

2747. **Arlitt, A. H. Family relationships.** New York: McGraw-Hill, 1942. Pp. viii + 277. \$2.50.—Intended for college students interested in the psychological aspects of family interrelationships, this book is based on case studies of married couples who belonged to superior socio-economic levels and whose problems were relatively minor in nature. Conclusions of the investigation refer to causative factors and trends while topics include: courtship and marriage; preparation for marriage; predicting success in marriage; husband and wife relationships; parent-child relationships; the relation of child to child; the position of relatives; social and economic changes influencing family development; trends in family organization.—*P. S. de Q. Cabot* (Simmons).

2748. **Bavelas, A., & Lewin, K. Training in democratic leadership.** *J. abnorm. soc. Psychol.*, 1942, 37, 115-119.—This is a preliminary report

about a rapid retraining of mediocre leaders into efficient democratic leaders by changing their attitudes and techniques. A type of "clinic-on-the-job" with genuinely democratic methods was conducted.—*C. H. Johnson* (Portland, Ore.).

2749. **Bircher, E. [Panic: nature, causes, and treatment.]** *Schweiz. med. Wschr.*, 1939, 69, 768 ff. —[Abstracted review; original not seen.] In earthquakes, famines, military disasters, and like catastrophes all peoples are subject to panic. In this fear neurosis the instinct of self-preservation takes dominance, especially in the more unstable and psychopathic members of a group. Their panic reactions are transmitted to others, so that no one is immune. Declining and weakened peoples are more subject to panic than others. Psychologic education of the masses and strengthening of authority are important in counteracting the tendency toward panics.—*R. M. Stogdill* (Ohio Bureau of Juvenile Research).

2750. **Black, J. W. A study of voice merit.** *Quart. J. Speech*, 1942, 28, 67-74.—Experimental groups of 184 and 172 subjects and control groups of 118 and 66 subjects indicated their preferences for 6 recorded voices by the method of paired comparisons. The experimental subjects were more sensitive to voice merit as a result of a one semester speech course. Physical measurements of the 6 voices showed that the preferred voices manifested more pitch changes and such durational characteristics as greater total time and greater proportion of unvocalized time.—*W. H. Wilke* (New York University).

2751. **Broughton, P. S. Government agencies and civilian morale.** *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 168-177.—Practically all government agencies affect morale; welfare and community services, e.g., are of great importance in this respect. The services, output, and policies of government publicity agencies are discussed. The director of the Office of Facts and Figures "is probably coordinating more individual writers and public relations men and greater resources for reaching the human mind than any individual in history." In the military services, news policies are dictated by military necessities. Those in charge of government publicity agencies have to combat the tradition of reporting facts without "conveying emotional conviction." "Fortunately, however, the secret of morale lies less in reporting than in having something worth while to report."—*S. S. Sargent* (Barnard).

2752. **Campbell, I. G. A study of the fitness of color combinations in duple and in triple rhythm, to line designs.** *J. exp. Psychol.*, 1942, 30, 311-325.—3 basic designs, possessing triangular, circular, and rectangular units, were presented in two colors in alternate rhythm or in a rhythm in which one unit was shown in one color followed by two units presented in a second color. 6 pairs of color combinations were used in both the duple and triple rhythm. The object was to determine if particular color combinations are "more fitting" to particular de-

signs than to others, and if particular designs are "more fitting" to each of the two kinds of rhythm. The results reported are merely tentative; the correlations submitted are evaluated in terms of affective appeal, saturation-contrast, and similarities of expressive (emotional) characteristics.—*M. J. Zigler* (Wellesley).

2753. **Canella, M. F.** *Psicologia differenziale delle razze umane.* (Differential psychology of races.) *Riv. Psicol. norm. pat.*, 1940, No. 3-4.—[Abstracted review; original not seen.] No single criterion is suitable for defining race; psychologically, cultural determination does not in itself negate basic biological differences. The possibility of psychological differentiation, by tests or other objective methods, implies a basis of superiority or inferiority. The adaptive characteristics of a race may change in the course of time. Rather than following color lines, racial classification proceeds by analogy with primitive-civilized distinctions, as Lévey-Bruhl has shown.—*H. D. Spoerl* (American International College).

2754. **Cantril, H.** *Public opinion in flux.* *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 136-152.—Poll results at 6 scattered intervals between pre-war 1939 and November, 1941 show how the issues changed step by step from complete neutrality to declaration of war. Several diagrams of public opinion trends are presented; they "show beyond any shadow of doubt that public opinion is sensitive to events." The most sensitive curve is that indicating which side people think will win the war. Poll results show that the President could have gotten us into war somewhat faster if he had chosen to do so; also that on many important issues Congress lagged behind the people. Intensity, stability, breadth, and depth of opinions are discussed briefly, with examples. In conclusion implications for morale are given; 9 components of morale are described.—*S. S. Sargent* (Barnard).

2755. **Carnap, R.** *Introduction to semantics.* Cambridge, Mass.: Harvard University Press, 1942. Pp. xii + 263. \$3.50.—"It is the purpose of this book to furnish a theory [of meaning and interpretation] called semantics. It will be seen that this theory, if sufficiently developed, contains not only a theory of designation, i.e. the relation between expressions and their meaning, but also a theory of truth and a theory of logical deduction."—*A. Thomsen* (Elmo Roper, Market Research).

2756. **Creangă, I.** *Măsurarea aptitudinii muzicale prin metoda testelor.* (The measurement of musical aptitudes through tests.) *Rev. Psih.*, 1940, 3, 129-169.—[Abstracted review; original not seen.] The Seashore group tests were used. Since they do not measure musicality itself, the author added individual melody tests in which the subject was asked to execute musical motifs. The conclusion is that lack of rhythmic sense indicates a lack of musical ability.—*S. M. Strong* (Minnesota).

2757. **Cupcea, S.** *Constituția individuală în circulația valorilor culturale.* (Individual constitu-

tion in the course of cultural values.) *Rev. Psih.*, 1940, 3.—[Abstracted review; original not seen.] Every epoch has had its great men of a particular constitutional type due to the dominating culture of the period. The epoch of theologians, metaphysicians, and philosophers has produced famous men of the asthenic type. Positive science of the 19th century has produced scholars of the pyknicy-cyclothymic type. City people have an asthenoid, rural people a pyknoid tendency. The asthenic type predominates with the rise of cultural level. Superior cultural settings and urban settings select individuals with longilinal constitutional tendency. The consequences are the ascension of the male vis-à-vis the female (since he is longilinal), the growth of schizophrenia, and what is more important, the reduction of the birth rate, since the longilinal type is less fertile. A balanced culture will utilize each type according to its dominant values and harmonize the two constitutional values of abstraction and action.—*S. M. Strong* (Minnesota).

2758. **Emme, E., & Rich, C.** *Factors in the religious development of 38 college students.* *Proc. Ia Acad. Sci.*, 1941, 48, 395.—Abstract.

2759. **Eysenck, H. J.** *The appreciation of humour: an experimental and theoretical study.* *Brit. J. Psychol.*, 1942, 32, 295-309.—3 tests involving the ranking of 189 jokes of various kinds were given to 16 subjects. The resulting rankings were correlated, and the correlations factor analysed. In each of the 3 analyses, a positive general factor appeared first, accounting for 19.4% of the variance. Several bipolar factors were also extracted, each of which contributed some 5-7% of the variance. These factors divided the subjects into types according to liking for (1) sexual as opposed to non-sexual jokes, (2) complex as opposed to simple jokes, (3) personal as opposed to impersonal jokes. A temperament test showed that extraverts preferred sexual and simple jokes, while introverts preferred complex and non-sexual jokes. Extraverts did not show a better sense of humor than introverts, but differed from them in the manner of appreciating humor. Analysis of the jokes used, their rank orders, the introspections and comments of the subjects, and the correlations between types of appreciation and temperamental factors supported the view that laughter was due to the joyful consciousness of superior adaptation, while on the cognitive side the conditions responsible for the emergence of laughter emphasized the sudden insightful integration of incongruous ideas, attitudes, sentiments, etc.—*M. D. Vernon* (Cambridge).

2760. **Fay, P. J., & Middleton, W. C.** *Relationship between musical talent and preferences for different types of music.* *J. educ. Psychol.*, 1941, 32, 573-583.—54 college students were given the sense of pitch, sense of rhythm, and sense of time sections of the Seashore test. Two weeks later 12 musical selections, ranging from classical to swing music, were played for and rated by the group on a

7-point scale of pleasantness-unpleasantness. The ratings were fairly reliable, with classical music being rated higher than popular music (especially by women). "Individuals who prefer romantic classical music are slightly superior in sense of pitch and rhythm to those who prefer old and modern classical music, they are decidedly superior in musical talent to individuals who prefer light classical music. Individuals who prefer swing music are decidedly inferior in sense of pitch, rhythm and time to those who prefer classical music. Continued broadcasting of serious music may contribute to the improvement of the musical tastes of talented individuals in the lower economic levels."—J. W. Macmillan (Maryland).

2761. Fearing, F. **The appraisal interview.** In *McNemar, Q., & Merrill, M. A., Studies in personality.* New York: McGraw-Hill, 1942. Pp. 71-85. —This is a theoretical discussion and empirical analysis of the interview as a social situation "involving the interaction of persons organized with respect to an explicitly expressed goal." Usually, attempts to rationalize the interview have stressed the units or devices employed in the appraisal, so that the individual was conceived as the sum of the discrete units in which the appraisal was expressed. Although in terms of conventional statistical appraisal the interview appears as an unsatisfactory method of appraisal, it is still widely used. The explanation is that "certain kinds of appraisal can be made in no other manner except in a situation involving continuous social interaction." Although certain types of bias may be dangerous for certain purposes, the elimination of bias is neither possible nor desirable. Bias is "another word for the integrating factor that makes the judgment a structured whole."—G. S. Speer (Central YMCA College).

2762. Fisher, M. S. **Helping young America to responsible parenthood through changing psychological attitudes.** *J. Hered.*, 1942, 33, 101-104. Also *Eugen. News*, 1942, 27, 1-4.—To prevent the loss to the nation, now taking place, of children of the educationally privileged, it is necessary to recognize and to change certain prevailing destructive attitudes which defeat parenthood. These are in the main 3: self-centeredness, self-defensiveness, and self-distrust. Attitudes which help toward achieving responsible parenthood are: self-forgetfulness, self-control, and self-friendliness. Well-adjusted and friendly parents give to their children the right attitudes toward the self and others. Particularly important is the need to achieve inner balance between the cultural emphasis on cooperation on the one hand and competitiveness on the other, a conflict which is productive of anxiety.—G. C. Schwesinger (American Museum of Natural History).

2763. Fritsch, A. **Zur psychologischen Charakteristik des Kunst- und des Volksliedes.** (The psychological characteristics of concert and folk songs.) *Arch. ges. Psychol.*, 1941, 108, 372-411.—50 folk songs and 50 similar productions of literary poets were studied statistically and experimentally

(with the aid of 4 educated judges) according to the criteria of O. Sterzinger, who participated in the investigation. Folk songs were found to be more readily singable, richer in nouns, poorer in adverbs, somewhat more wordy, somewhat richer in figures of speech, etc.—H. D. Spoerl (American International College).

2764. Hamren, V. **Social nearness between the A.F. of L. and the C.I.O.** *Social. soc. Res.*, 1942, 26, 232-240.—Despite great social distance between the controlling bodies of the A.F. of L. and the C.I.O., a study of the members of both groups shows rather considerable sympathetic understanding of common goals and purposes. 12 factors are listed "which appear to hold potential force for nearness."—S. S. Sargent (Barnard).

2765. Horn, E. **Language and meaning.** *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 377-413.—The contributions to the problems of language and meaning by different schools and specializations in psychology, by anthropology, semantics, linguistics, philosophy, and education are noted. The bulk of experimental evidence in this field has come from educational research. Significant trends in theory refer to: greater recognition of the importance of language in all human culture, rejection of the view that language is the external reflection of psychical processes, and acceptance of the fact that verbal symbols have a predominant function in thinking. The approach to problems of language, meaning, and thought is behavioristic. The meaning of meaning is not to be found in formal definition; language and meaning are social in origin, structure, and function. To ensure the clearer understanding and use of constructs, important implications for teaching purposes refer to: a revision of the curriculum, a reduction in the number and difficulty of constructs to be used, the use of concrete sources of experience, a revision of the use of tests, and a systematic provision for the improvement of language abilities.—P. S. de Q. Cabot (Simmons).

2766. Jahoda, M. **Incentives to work; a study of unemployed adults in a special situation.** *Occup. Psychol.*, 1942, 16, 20-30.—From observations of unemployed in a cooperative work situation, it is concluded that "it appears that the strongest incentive to work in normal industry is the general economic atmosphere of our present society, including its concepts of social hierarchy and social values, competitiveness, and the fact that we become accustomed, and have trained generations to express a social position in terms of income and wages. . . . The lack of this general atmosphere resulted in a decrease of the amount and intensity of work. Other subsidiary motives could be observed, but they were not strong enough to overcome the inhibitions created by the sudden change of atmosphere."—N. R. Bartlett (Brown).

2767. Kerr, W. A., & Remmers, H. H. **The construction and validation of a group home environment scale.** *Proc. Ind. Acad. Sci.*, 1941, 50, 201-206.—The scale, which includes items such as "Does

your family have an automobile?" and "Are there any flowers or shrubs in front of your home?", was prepared for administration to school children. The items were selected on the basis of evaluation by judges and divided tentatively into 4 sections to measure esthetic level, cultural level, economic level, and community prestige. The scale was administered to high school seniors representing approximately 1300 homes in Gary, Indiana. A split-half reliability of .81 for 200 papers and a correlation of .66 between scores of 29 pairs of siblings are reported for the whole scale. Two evidences of validity are presented: a correlation of .80 for 22 homes between scores on scales filled out by children and scores on scales filled out by visitors to the homes; a perfect correlation for 6 large schools between children's average scores and average ratings by 20 school officials of the socio-economic level of the homes represented in the 6 schools.—G. R. Thornton (Purdue).

2768. Lauer, A. R., & Uthoff, L. An empirical study of compensation. *Proc. Ia Acad. Sci.*, 1941, 48, 357-359.—56 CCC enrollees and 19 college students were given (1) a social response multiple choice inventory and (2) a gradation answer inventory, which latter was administered twice. The following correlations were obtained: (1) between course of action most likely to be followed and the course believed most desirable, .53; (2) between test and retest on test 2, .723; (3) between test 1 and test 2, .396.—B. Wellman (Iowa).

2769. Lazarsfeld, P. F. The daily newspaper and its competitors. *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 219, 32-43.—A comparison between daily newspapers, and magazines and radio with regard to coverage, audience, influence, and advertising.—S. S. Sargent (Barnard).

2770. Lo, C. F. Moral judgments of Chinese students. *J. abnorm. soc. Psychol.*, 1942, 37, 264-269.—Several groups of Chinese students ranked 15 "vices" and 16 "ideals" in order of importance. A high degree of correspondence was found among the groups. Comparisons with earlier studies of American student groups yielded correlations of .50 or higher. Both racial groups "were critical about sex irregularity, stealing, and cheating, and tolerant of smoking and dancing. Honesty was unanimously agreed upon as the most important ideal, while obedience, thrift, and reverence were generally regarded as of small importance."—F. W. Finger (Virginia).

2771. Locke, A., & Stern, B. J. [Eds.] *When peoples meet: a study in race and culture contacts*. New York: Progressive Education Association, 1942. Pp. xii + 756. \$3.50.—This work is a compilation of selections from the writings of 76 authors, chiefly contemporary social scientists, who have written on the topics of cultural interchange, cultural dominance, and race relations. The first two sections of the book present varied instances of culture contacts and of culture conflicts. The third and fourth sections have to do chiefly with race attitudes, with special reference to the Jew and the

Negro. The last section deals with contemporary imperialism, European minorities, and American minorities. The book is concluded with a "Who's Who" of the authors whose works were selected for presentation. The only psychologist included is Klineberg. Anthropologists represented include Benedict, Boas, Herskovits, Linton, Mead, Powdermaker, Redfield, Sapir, Shapera, Shapiro, and Wissler.—W. Dennis (Louisiana).

2772. Malinowski, B. *Man's culture and man's behavior*. *Amer. Scientist*, 1942, 30, 66-78.—In the development of language the symbolic object or act is invariably a stimulus for action, and its significance depends upon the situation. "The integrative functional identity of symbolic systems is due to their having been developed as a by-product of experience and action." Knowledge as the symbolic system organizing all the phases of human behavior implies foresight, calculation, and systematic planning. An instrumentally implemented sequence becomes a part of a long chain of linked instrumental cooperation in highly differentiated cultures. An institution occurs when "human beings organize under a charter that defines their common aims and that also determines the personnel and the norms of the group."—D. Reed (Brown).

2773. Montagu, M. F. A. *The nature of war and the myth of nature*. *Sci. Mon.*, N. Y., 1942, 54, 342-352.—According to Sir Arthur Keith, race prejudices are inborn, are working for the ultimate good of mankind, and therefore must be given a recognized place in all our efforts to obtain natural justice. War, too, is a biological necessity. Keith, a physical anthropologist, has overstepped the frontiers of his own particular field in the treatment of these subjects. Actually, the innate prejudice theory is blasted by the facts of cultural anthropology. War and prejudice are artificial products of civilization and arise from purely artificial conditions created by highly 'civilized' modes of living.—E. Gorden (Brooklyn).

2774. Osborn, F. H. *Recreation, welfare and morale of the American soldier*. *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 50-56.—The present Morale Branch of the War Department (recently changed to the Special Services Branch) was created in March, 1941. Staffed with 70 officers and over 150 civilians, it has 6 operating divisions or services: army exchange, motion pictures, welfare and recreation, services, morale research, and information. A brief summary of the work of each is given. A number of psychologists and statisticians are working with the last two divisions, chiefly studying the factors affecting morale and making recommendations. Results are difficult to gauge, but "more is being done than has ever been done for any army before."—S. S. Sargent (Barnard).

2775. Park, M. *Diagnostic study of development in rehearsal and performance of students in dramatic interpretation*. *Univ. Ia Stud. Aims Progr. Res.*, 1941, No. 69, 262-266.—Abstract of doctoral dissertation.

2776. Payne, A. C. **How much social mindedness do NYA workers have?** *Sch. & Soc.*, 1942, 55, 299-300.—Of 231 NYA applicants 30% considered they had the right to spend 4-40% of their income on luxury even though some of their fellow workers do not have enough to eat.—M. Lee (Chicago, Ill.).

2777. Pratt, C. C. **Psychology; the third dimension of war.** *Columbia Home Front Warbk.*, 1942, No. 6. Pp. 26.—To excuse the loss of World War I, the German leaders promulgated a doctrine of rationalization, emphasizing the effect on morale of Wilson's "false" promises. This psychological aspect of the military was elaborated, to take its place with the economic and military phases in the tridimensional modern war structure. Psychological warfare has evolved to include 2 major divisions: tests and measurements, and morale and propaganda. The Axis propaganda program did not count on the unifying effect that bombings and unexpected attack would have on the American and British people. The use of retaliatory propaganda by a democracy is justified by the writer.—F. W. Finger (Virginia).

2778. Raab, L. M. **The effect of lectures on art principles upon art production at the fifth and sixth grade levels.** *Univ. Ia Stud. Aims Progr. Res.*, 1941, No. 69, 217-222.—Abstract of doctoral dissertation.

2779. Roheim, G. **The primal horde and incest in Central Australia.** *J. crim. Psychopath.*, 1942, 3, 454-460.—The author cites narratives concerning punishment meted out to flagrant offenders of the incest taboos as evidence that the primal horde form of social organization as posited by Freud may have existed in certain primitive cultures in the not too distant past.—A. Chapanis (Yale).

2780. Rountree, B. S. **Poverty and progress; a second social survey of York.** London: Longmans, Green, 1941. Pp. xx + 540. 15s.—[Abstracted review; original not seen.] This work repeats a survey made of York, England, in 1899, a comparison of the two indicating the amount and pace of social change. The changes for York correspond to the changes for England as a whole. The birth rate dropped from 30 per thousand to 15 per thousand population, the proportion of children, by 30%, with a progressive aging of the whole population. York's population increased 18% as against England's 27%. At least 31% of the working classes, which comprise 57% of York's population, are found below "the poverty line." Economic causes account for nearly three-fourths of all poverty; old age, widowhood, and illness are the next in importance. The effect on children is serious. Poverty due to low wages dropped from 52% in 1899 to 9% in 1936; that due to largeness of family from 22% to 8%; while old age and illness, as causes, rose from 5% to 24%. Unemployment, the main cause of destitution, rose from 2% to 45%. Church attendance and drinking declined, while gambling and betting grew enormously. The present community is failing by 25% to replace it-

self.—G. C. Schwesinger (American Museum of Natural History).

2781. Seashore, C. E. **A scientific approach to musical aesthetics.** *Brit. J. Psychol.*, 1942, 32, 287-294.—In answer to the criticisms of Mainwaring of the empirical approach to aesthetics (see XVI: 271), the author sets out in defense of the empiricist's point of view a single concrete case dealing with the significance of a tonal spectrum in musical aesthetics. He discusses how science can clarify and define the essential concepts in aesthetics, how science broadens the horizon for insight into the full nature of the aesthetic situation, how it creates a feeling of confidence in the tangibility of aesthetic issues, and aids in dealing systematically with aesthetic problems. He endeavours to show that the methods of both biological and physical sciences are applicable in musical aesthetics, and that science encourages co-operation with other legitimate approaches, and supplements them rather than conflicting with them.—M. D. Vernon (Cambridge).

2782. Seashore, C. E. **Critical training vs. artistic performance.** *Educ. Music Mag.*, 1941, Sept.-Oct., 4-5.—The attitude during the learning of musical material is critical and technical, the mood during artistic performance should be "free from awareness of specific details." The training period should be devoted to the recognition and mastery of difficult factors. Portrait.—F. W. Finger (Virginia).

2783. Seashore, C. E. **Science in music.** *Science*, 1942, 95, 417-422.—This article points out the rôle which psychology can and does play in music. Attention is specifically drawn toward the scientific description of musical tones and the means for producing them; the nature, scope, and limitations of musical hearing and appreciation; the analysis and evaluation of musical talent and musical achievement; etc.—F. A. Mote, Jr. (Connecticut).

2784. Smith, M. **A revised behavioristic approach to social psychology.** *Sociol. soc. Res.*, 1942, 26, 222-231.—Most social psychologists and sociologists writing since World War I can be identified with Chicago's functionalism or with Woodworth's dynamic psychology, both of these being moderate and modified forms of behaviorism. Behavior is "the integrated and purposeful activity of animate organisms." Differences between acts occur because of variations in stimuli and in the organization of action patterns of the individual. "The social psychology deriving from this approach should elaborate the contributions of the individual organism, including both those that are peculiar and those that he has because of his group or cultural experiences. . . . Both individual and situation must receive attention."—S. S. Sargent (Barnard).

2785. Taylor, W. S. **Changing attitudes in a conflict of cultures.** *Character & Pers.*, 1941, 10, 87-108.—The changes in patterns of interrelated attitudes of Hindu students in India who have come under the influence of two other cultures, designated as Christian and secular, were studied. Scales

were designed to measure the attitudes of the group toward these cultures. The results may be summarized in the following manner: (1) Different elements of the orthodox Hindu culture patterns succumb with varying degrees of rapidity to pressure from foreign influences. (2) Rate of change depends upon whether the attitudes are theoretical or practical and whether they refer to social problems. (3) Foreign influences which produce changes in the original cultural patterns are less complex than influences preventing changes. (4) Original culture patterns which tend to persist are abstract and have little connection with practical problems. (5) Change from one cultural pattern to another is facilitated by persistence of abstract or general attitudes. (6) Social attitudes in the Hindu culture show the greatest change. (7) Acquisition of new non-Hindu culture patterns is governed by need for security and self-assertion.—*M. O. Wilson* (Oklahoma).

2786. Temple, W. J. The objective evaluation of the effects of training on the use of frequency, intensity, and duration in speech. *Univ. Ia Stud. Aims Progr. Res.*, 1941, No. 69, 223-227.—Abstract of doctoral dissertation.

2787. Travers, R. M. W. A study in judging the opinions of groups. *Arch. Psychol.*, N. Y., 1941, No. 266. Pp. 73.—2 groups, of 200 and 56 students respectively, expressed agreement with or dissent from a series of highly controversial statements on social or economic questions. Each subject was required, in addition to giving his own attitude, to estimate the probable degree of agreement on the question by the group. These estimates disclosed large errors, ranging from 0% to 100%. Such errors were also present in judging the opinion of the national group, as disclosed by Gallup surveys. The average of the judgments of group opinion proved to be a better estimate than any single judgment. Individuals tended to overestimate the percentage of the group that thinks as he does, but bias was not directly related in amount to depth of feeling. Errors in judging one issue tended to be correlated with errors on other issues. Ability to judge group opinion was found to have little relationship with measures of general ability (intelligence, general culture, reading ability) but to be somewhat related to personality adjustment. It is probably related to social intelligence. No sex differences were found.—*K. W. Spence* (Iowa).

2788. Voelker, C. H. The one thousand most frequent spoken words. *Quart. J. Speech*, 1942, 28, 189-197.—The 1,000 most frequent words in the active vocabulary of speakers as found in a sample of 100,000 words.—*W. H. Wilke* (New York University).

2789. Willoughby, R. R. A note on personality factors affecting the rehabilitation of problem families. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 281-283.—Mental incapacity and psychotic tendencies appear to be the chief factors that differentiate

families who successfully respond to treatment from those who do not.—*G. S. Speer* (Central YMCA College).

2790. Woolbert, R. L. The logic used in sociological case studies. *Univ. Ia Stud. Aims Progr. Res.*, 1941, No. 69, 228-237.—Abstract of doctoral dissertation.

2791. Young, K. Variations in personality manifestations in Mormon polygynous families. In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 285-314.—This study of the social, economic, and emotional adjustments of both husbands and wives is based on approximately 125 records of men and their families who at some time lived under Mormon polygyny. Living in polygyny created problems of social-emotional adjustment for both the husbands and wives. Opportunity for public approval was enhanced, and affectional and directly sexual variations were permitted within the culturally approved pattern. In many cases a sense of inadequacy was induced in regard to property and family authority and interwife conflicts, and guilt feelings arose in connection with monogamous standards.—*G. S. Speer* (Central YMCA College).

2792. Zeiss, H., & Pintschovius, P. [Eds.] *Zivilisationsschäden am Menschen*. (The injurious effects of civilization upon man.) Munich & Berlin: J. F. Lehmann, 1940. RM. 13.—[Abstracted review; original not seen.] A large number of contributors present accounts of the effects of civilization upon constitution and biological functioning; another group presents psychological findings. In civilized life much energy is wasted, there is over-stimulation, reproductivity is disturbed, individualism is divisive, feet and teeth are neglected. Psychological authors include W. Achelis, E. v. Skramlik, L. Doxiades, H. Hetzer. A psychical "back to nature" movement is indicated.—*H. D. Spoerl* (American International College).

[See also abstracts 2538, 2558, 2586, 2595, 2608, 2623, 2624, 2637, 2673, 2674, 2692, 2700, 2713, 2724, 2799, 2800, 2857, 2884, 2910, 2917, 2918, 2924, 2932, 2935.]

CRIME AND DELINQUENCY

2793. Almeida, E. [Contribution to the study of criminality in minors.] *An. Assist. Psicopat.*, 1941.

2794. Banay, R. S. Alcoholism and crime. *Quart. J. Stud. Alcohol*, 1942, 2, 686-716.—Total admissions to Sing Sing Prison, 1938-1940, were surveyed. Of 378 primary intemperate prisoners, 252 had been intoxicated at the time of commission of the crime. For closer study 200 white males were divided into early and confirmed intemperates. In education, MA, and IQ, more confirmed intemperates were found in lower brackets. Of 22 inmates convicted of murder, 10 had used alcohol to excess. Alcoholism was closely related to the commission of the crime or was directly responsible for it in 25% of the total number of cases surveyed.—

W. L. Wilkins (U. S. Marine Corps Base, San Diego, Calif.).

2795. Campioni, T. **Cranial trauma as an etiological factor in personality disorders of children.** *J. crim. Psychopath.*, 1942, 3, 368-382.—In spite of the fact that the human infant is subject to a complexity of accidents which threaten developing nervous structures, studies of the causative factors involved in juvenile criminality frequently omit mentioning cranial trauma. Marked personality and character deviations resembling those occurring in cases of epidemic encephalitis may result from cranial injuries long after the initial trauma. Unlike the behavior aberrations of the post-encephalitic, however, noticeable improvement is possible in the behavior of post-traumatics. 3 illustrative cases are cited.—A. Chapanis (Yale).

2796. Chisnall, B. **The interests and personality traits of delinquent boys.** *Brit. J. educ. Psychol.*, 1942, 12, 76.—Abstract.

2797. Cunha Lopes, —. [Aiding subjects with suicidal tendencies.] *An. Assist. Psicopat.*, 1941.

2798. Doll, E. A., & Brooks, J. J. **The therapeutic uses of the Vineland Social Maturity Scale in its application to adult prisoners.** *J. crim. Psychopath.*, 1942, 3, 347-358.—Therapeutic advantages claimed from the application of the Vineland Social Maturity Scale to prisoners are the following: (1) The administration of the scale has a cathartic effect in allowing the prisoner to tell his story with sympathetic understanding and appreciation. (2) The scale provides a device for self-analysis and self-guidance enabling the prisoner to see his respective strong and weak points. (3) It furnishes the prisoner with a standard of social conduct and an understanding of the kind of conduct which is acceptable to society. (4) It aids in the establishment of rapport between prisoner and civilian interviewer, a necessary first step for constructive rehabilitation. (5) Results obtained on the scale suggest kinds of educational curricula (vocational, avocational, and recreational) best suited for each individual. (6) The scale affords a measure of the "whole prisoner," which cannot be obtained by intelligence and other abstract abilities tests.—A. Chapanis (Yale).

2799. Fauquier, W., & Gilchrist, J. **Some aspects of leadership in an institution.** *Child Developm.*, 1942, 13, 55-64.—119 institutionalized male delinquents filled out a questionnaire concerning leadership (sample items are presented). The staff also made ratings of the boys. Leaders were older, of longer residence, taller, and heavier than non-leaders. They were lower in intelligence and misconduct count but better adjusted than the others. The staff and the boys differed considerably in whom they considered to be the leaders. Various personality characteristics of the leaders are discussed.—C. N. Cofer (George Washington).

2800. Feiner, R. **Bases of the delinquent acts of well-to-do and poor children.** *Smith Coll. Stud. soc. Work*, 1942, 12, 302-328.—Motivations behind the

delinquent acts in both groups are similar in many respects, and the treatment outlook is very similar. From a treatment point of view, however, the economic factor does differentiate the two groups of delinquents.—K. S. Yum (Chicago).

2801. Freedman, H. L. **The psychiatrist looks to the new penology.** *J. crim. Psychopath.*, 1942, 3, 430-440.—The outstanding trend in modern penology has been toward individualization of the prisoner through the psychiatric classification clinic. Questionnaires sampling the opinions of psychiatrists, penologists, and individuals in allied fields reveal a striking unanimity regarding the rôle of the psychiatrist as both classifier and therapist in the penal system of the future. The author points out the lack of trained personnel to execute even a fraction of this program and describes the proposed "Pennsylvania Plan" for establishing fellowships in penal psychiatry to fill the need.—A. Chapanis (Yale).

2802. Gray, M. G., & Moore, M. **The incidence and significance of alcoholism in the history of criminals.** *Amer. J. Psychiat.*, 1941, 98, 347-353.—In male prisoners, there is little difference in the nativity or marital status of alcoholics and non-alcoholics. Racial and religious distinctions correspond to those of the communities from which the prisoners originate. Distributions of age, intelligence quotients, and educational level do not differ greatly for the 2 groups. In the personal and familial backgrounds and in the sphere of domestic relations, however, are found differences between the 2 groups. Among women prisoners, there is a higher incidence of venereal disease among both groups than is found in the male prisoners. In general, there seems to be little difference between the alcoholic and abstaining criminal, either male or female. A discussion for future attitudes of society toward the problems of alcohol is given.—R. Goldman (Boston Psychopathic Hospital).

2803. Heymann, K. **Kleptomanie bei Kindern.** (Kleptomania among children.) *Z. Kinderpsychiat.*, 1941, 8, 112-119.—After pointing out that little children cannot properly be regarded as kleptomaniacs under any circumstances because they are not yet intellectually capable of understanding the nature of ownership, the author takes the position that among older children, persistent stealing falls under one or the other of two heads. There is kleptomania that has its roots in sexual conflict. More common among children is kleptomania that arises from a one-sided type of exaggerated extraversion in which objects of the external world hold such fascination for the child that he cannot resist the desire to take them. The second type can be distinguished from the first by the use of a test of visual memory designed by Toulouse and Pieron, a section of which is reproduced in the article.—F. L. Goodenough (Minnesota).

2804. Karpman, B. **Criminality as an expression of psychosexual infantilism.** *J. crim. Psychopath.*, 1942, 3, 383-429.—This article presents in detail a case study of a 20 year old boy who has served several

sentences for exhibitionism, sexual assault, and repeated thefts. On the basis of extensive dream and phantasy material it is concluded that the predatory activities of this individual were entirely consequent upon his extremely undeveloped, essentially infantilistic sex life. Feelings of sexual inferiority resulted in an over-compensation and attempts to bribe girls with lavish expenditures of money which, because of limited family finances, was most conveniently secured by theft.—A. Chapanis (Yale).

2805. Lane, W. D. *What makes crime?* *Publ. Affairs Pamphl.*, 1942, No. 34. (Rev. ed.). Pp. 31.—This pamphlet analyzes the psychological and sociological factors making for criminal behavior. The influences of neighborhood, family life, school, and nativity are outlined, as well as the results of more specific inter-personal relationships. Certain characteristics of the "American way of life" (e.g. emphasis on money, individualism, political corruption, questionable business practices) are shown to be of importance in producing asocial behavior. Finally, the problems of treatment and prevention of crime are discussed.—F. W. Finger (Virginia).

2806. Mannheim, H. *Some reflections on crime in war-time.* *Fortnightly*, 1942, No. 901, 38-46.—(*Child Developm. Abstr.* XVI: 129).

2807. Metfessel, M., & Lovell, C. *Recent literature on individual correlates of crime.* *Psychol. Bull.*, 1942, 39, 133-164.—This is a review of 96 titles published from 1930 to 1940. The definitions of crime and the multiple causation theory are considered. The material is organized under the headings of age, sex, race and nationality, physical traits, intelligence (incidence of feeble-mindedness among offenders, intelligence test scores of offenders, and intelligence in relation to age, sex, type of crime, and recidivism), and specific personality traits, most of the paper dealing with the latter two. The general conclusion from the study of personality traits is that the offenders are inferior in many aspects of personality. They worry, obtain high scores on neurotic inventories, and are retarded on tests of social maturity.—F. McKinney (Missouri).

2808. Monahan, F. *Women in crime.* New York: Washburn, 1941. Pp. 306. \$2.75.—Case histories of delinquent girls and 'women in crime' whom the author has known.—(Courtesy *Publishers' Weekly*).

2809. Müller, B. *Der Beweiswert von Geständnissen.* (The validity of confessions.) *Med. Klinik*, 1941, 37, No. 1.—[Abstracted review; original not seen.] Court confessions and declarations of guilt cannot be accepted at face value. In some depressive and manic states such declarations amount to confabulation; hysterics and other neurotics frequently accuse themselves of crimes. Suggestive questions may inspire the self-acceptance of false testimony.—H. D. Spoerl (American International College).

2810. Pacheco e Silva, A. C. *Psiquiatria clínica e forense.* (Clinical and forensic psychiatry.) São Paulo: Editora Nacional, 1940. Pp. 584.—

[Abstracted review; original not seen.] This is a compendium of general psychiatry, presenting disturbances of function and classifications by syndromes. Attention is given to toxicology and the influence of alkaloids. The latter portion of the book deals with forensic problems, including simulations, industrial accidents, suicide, and legal medicine; present Brazilian laws and ameliorative procedures are discussed.—H. D. Spoerl (American International College).

2811. Roșca, A., & Cupcea, S. *Influența mediului social asupra conduitei.* (The influence of the social setting on conduct.) *Rev. Psihol.*, 1940, 3, 420-425.—[Abstracted review; original not seen.] From the standpoint of the family setting, 272 juvenile delinquents in a reformatory (235 males and 37 females) were studied, with a control group of nearly the same characteristics. It was found that all forms of family disorganization contribute in a large measure to juvenile delinquency. Suicide and illegitimacy of the parents tend to develop similar maladjustments of the children, while homicide occurs inversely. Suicide, divorce, and illegitimacy go parallel with the cultural advancement of the masses, while homicide is related to more primitive socio-cultural forms. There is greater maladjustment in the city than in rural sections.—S. M. Strong (Minnesota).

2812. Rosenthal, P. *Group studies of pre-adolescent delinquent boys.* *Amer. J. Orthopsychiat.*, 1942, 12, 115-127.—The group behavior of pre-adolescent delinquents under confinement was studied by a group technique evolved in the children's ward of the Bellevue Hospital Psychiatric Department. Each of 53 spontaneously formed groups was detached from the ward and given enough space, time, and freedom from interruption to allow the delinquents to act out their conflicts in relation to the group. An intensive report of one group is presented. The group method is offered as an aid to diagnosis, without which prognosis, therapy, and disposition can be nothing more than rationalization or speculation.—R. E. Perl (Jewish Board of Guardians).

2813. Siewers, A. B., & Davidoff, E. *Attempted suicide: a survey of 150 patients admitted to two general hospitals.* *J. nerv. ment. Dis.*, 1942, 95, 427-441.—In a study of 150 attempted suicides 34 patients were classified as psychotic; 87 as suffering from neuroses, alcoholism, drug addiction, or irreversible disease; and 29 were unclassified. Of the 59 males, 32 were married, while 59 of the 91 females were married. The average age of males was 46.8 years; of females, 30.0 years. Organic disease, personality deviations, marital and sexual maladjustments, and lack of employment were frequently encountered in the etiologic constellation.—R. M. Stogdill (Ohio Bureau of Juvenile Research).

2814. Veiga de Carvalho, H. *Os criminosos e suas classes.* (Criminals and their classification.) Rio de Janeiro: Editoria Freitas Bastos, 1941. Pp. 110.—[Abstracted review; original not seen.] On

the basis of personality dynamics, with consideration also for biological properties, 52 classes of criminality are differentiated and critically discussed. These fall into 3 main groups, accordingly as mesiological or biological factors predominate, and with a mixed group for borderline cases. Bibliography of 128 titles.—H. D. Spoerl (American International College).

INDUSTRIAL AND PERSONNEL PROBLEMS

2815. **Beyne, P.** [Review of aeronautic medicine, 1937 to 1938.] *Rev. Serv. Santé milit., Paris*, 1939, 111, 215 ff.—[Abstracted review; original not seen.] This review comprises: physiopathological effects (including neurological and mental) of atmospheric depression, mental effects of prolonged inhalation of oxygen, effects of inertia and centrifugal forces on the organism, and the question of adaptation to abnormal conditions imposed by flying. In flying, the organism does not adapt itself (as in mountain climbing) to mild anoxemia. Sympathetic and parasympathetic hyperactivity develop slowly and progressively. Capacity for adaptation to high altitudes depends essentially on predominance of sympathetic over parasympathetic excitability. Sympathicotonic persons are "born champions" because of the rapidity and perfection of their endocrine and psychophysiological reactions. The bibliography includes French, German, Italian, English, United States, and Chinese references.—M. E. Morse (Baltimore, Md.).

2816. **Bingham, W. V.** The Army personnel classification system. *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 18-28.—The objectives of classification are to conserve man power, expedite training, and enhance morale. The task of classifying and allocating personnel involves 4 steps; the recruit is "under scrutiny for a few hours at an Army Induction Station, for three or four days in a Reception Center, for several weeks in a Replacement Training Center, and finally in a tactical unit or other installation in which he is likely to serve for some months at least." Procedures of selecting, classifying, and assigning officers are also described. By continuously improving personnel procedures the Army is striving to prevent occupational casualties.—S. S. Sargent (Barnard).

2817. **Blatt, N.** [Visual tests in the selection of aviation personnel.] *Rev. Serv. Santé milit., Paris*, 1940, 112, 323 ff.—[Abstracted review; original not seen.] Apparatus is not yet adequate for judging altitude vision, and requirements for military and commercial pilots vary greatly in different countries. Pupillary reflexes, accommodation, visual fields, color and light senses, binocular and stereoscopic vision, oculomotor equilibrium, and perceptive rapidity must be absolutely normal. The tests and qualifications are described in detail. Re-checks should be made every 6 months and supplementary tests conducted under flying conditions. Slight myopia or astigmatism are disqualifying. Refractive errors, although corrected by glasses, are

usually considered as disqualifying, but no valid reasons have been advanced.—M. E. Morse (Baltimore, Md.).

2818. **Comberg, W.** [Remarks on visual disturbance caused by on-coming light in driving.] *Klin. Mbl. Augenheilk.*, 1941, 106, 480-482.—[Abstracted review; original not seen.] No damage can be done to the eye by strong headlights; suggestions for improvement of automobile and traffic lights are included.—D. J. Shaad (Lawrence, Kansas).

2819. **Dodge, A. F.** Characteristics of good clerks. *Person. J.*, 1942, 20, 324-327.—The successful clerk dislikes responsibility, does not make friends easily, and lacks self-sufficiency. These traits are all directly opposite to those found in the more successful salesmen. The employer of clerical help should hire the bashful, unassuming applicants.—M. B. Mitchell (Minnesota).

2820. **Drake, C. A.** When wage incentives fail. Part I: individual incentives. *Advanc. Management*, 1942, 7, 42-44.—The failure to get above normal production lies in the misuse or failure to use the incentives that make men work, plus the fact that some of those who are working are not interested in or affected by present bonus systems, others are working at a type of work for which they are not fitted, and others have acquired stereotyped patterns of work that are not subject to change unless other incentives than wages, or wages in the incentive form in which they are used at present, are adopted. Security, status, and praise are suggested as incentives that may produce 100% plus performance.—H. Moore (Business Research Corporation).

2821. **Encausse, P.** [Parachute jumping and its consequences.] *Pr. méd.*, 1939, 47, 1305 ff.—[Abstracted review; original not seen.] Encausse describes the various somatic injuries to which parachutists are liable, the best type of harness for distributing shock, and the nervous disturbances due to functional or organic causes (dizziness, tinnitus, violent headache, loss of consciousness). The normal rapidity of descent is 5 meters per second; the maximum safe velocity is 7.5 meters per second.—M. E. Morse (Baltimore, Md.).

2822. **Hays, C. E.** Army instruments of individual appraisal. *Occupations*, 1942, 20, 519-520.—Abstract.

2823. **Holliday, F.** A survey of an investigation into the selection of apprentices for the engineering industry. *Occup. Psychol.*, 1942, 16, 1-19.—This is a general account of a program for selecting apprentices. The author makes certain recommendations on the procedure to be adopted in recruitment and selection.—N. R. Bartlett (Brown).

2824. **Kogan, E.** [Comments on color-perception tests in transportation workers.] *Vestn. Oftal.*, 1941, 18, No. 4, 431 ff.—[Abstracted review; original not seen.] Contending that drivers do not require the same degree of precision in color discrimination as flyers, the author arranged a signal semaphore test which was given to 300 persons dis-

qualified on the basis of pigment tests (Stilling, Ishihara, or Rabkin). 125 subjects distinguished the signals and 101 recognized red. Only 74 of the 300 could be justifiably excluded from engaging in driving as an occupation.—*D. J. Shaad* (Lawrence, Kansas).

2825. **Lauer, A. R.** The problem of night driving in relation to accident prevention. *Proc. Ia Acad. Sci.*, 1941, 48, 395-396.—Abstract.

2826. **Louttit, C. M.** Psychological examining in the United States Navy: an historical summary. *Psychol. Bull.*, 1942, 39, 227-239.—The significance of this review of 57 papers lies in its discovery of reports not included in previous bibliographies. Most of the titles have dates of 20 years ago, and appeared in naval publications. The bulk of the material deals with measurement of intelligence of recruits. The review is divided into these groups: recruit selection, officer personnel, aviators, and miscellaneous.—*F. McKinney* (Missouri).

2827. **Martin, G.** [Eye movements as the cause of faulty steering of airplanes, automobiles, and bicycles.] *v. Graefes Arch. Ophthal.*, 1940, 142, No. 3, 262-275.—[Abstracted review; original not seen.] Laboratory tests demonstrated that manipulation of an airplane steering mechanism during conjugate gaze to one side caused involuntary pressure on the mechanism, tending to turn it toward the same side. Downward pressure resulted from looking down, but upward gaze had no pressure effect. No effect was noted on the foot control. Manipulation of bicycle handle bars showed contralateral rotation during conjugate gaze to one side.—*D. J. Shaad* (Lawrence, Kansas).

2828. **McFarland, R. A.** Fatigue in aircraft pilots. *New Engl. J. Med.*, 1941, 225, 845-855.—"The essential variables in the phenomena of acute or chronic pilot fatigue and exhaustion are ascribed to psychologic factors such as emotional stress, regardless of whether it is related to adverse flying conditions, fear of accidents, economic and social insecurity, and unhappy marital adjustments. The major portion of the discussion is related to an analysis of certain contributing factors in pilot fatigue, especially lack of exercise, the reduced tension of oxygen encountered while in flight at high altitudes, the poor selection of food and the excessive use of alcohol and tobacco. Also, certain physical variables in the cockpits of airplanes are discussed as other contributing factors to fatigue, such as noise, vibration, poor illumination, glare, static from the radio and poor regulation of the ventilation and the temperature. Finally, the results obtained in a study of transoceanic airmen are analyzed to show the effects of long flights at moderately high altitudes."—*M. Keller* (Butler Hospital).

2829. **Milian, G.** [Aviators and alcohol.] *Bull. Acad. Méd., Paris*, 1939, 121, 636.—[Abstracted review; original not seen.] Milian protests against the use of alcoholic beverages by fliers off duty and gives figures. He believes that accidents caused by

faulty navigation are due as much to the pilot's condition as to mechanical defects.—*M. E. Morse* (Baltimore, Md.).

2830. **Miner, D. F.** Standardization; harmonizer of human effort. *Advanc. Management*, 1942, 7, 15-22.—Illustrations of principles of standardization in technical fields are accompanied by comparable principles in the human field, using the practises at the Westinghouse Electric Manufacturing Company as source for examples. 3 fields are illustrated: job rating and grading of production workers, position rating for office workers, and performance rating of office workers. The personal factors in job demands are 10: basic education, experience; aptitude, physical, mental, visual, unusual; and responsibility for equipment, product, and the safety of others. Point ranges, from 0 to 100, are assigned each criterion on each job, and the total point value of a job determines its pay range. Anchorage point jobs, 117 in 3 divisions, serve as points of departure for appraising the point values of others. Salaried positions are divided into 7 groups, from unskilled to policy making, and are defined in terms of gradations of functions and similarity of activity; 13 types of such activities are grouped in 283 separate jobs. Salaried positions are further divided into 3 types, tasks, duties, and responsibilities; measures of efficiency in each are determined by means of a questionnaire rating scale.—*H. Moore* (Business Research Corporation).

2831. **Shartle, C. L.** Fitting workers to jobs. *Person. J.*, 1942, 20, 328-332.—The Occupational Analysis Section of the U. S. Employment Service makes occupational composition studies to determine the types of jobs in a particular industry, gathers information about all kinds of occupations, and makes analyses of workers' abilities. Aptitude tests are used for selecting workers for training and for vocational guidance. Trade tests have been developed and are being used for selecting workers for many particular jobs.—*M. B. Mitchell* (Minnesota).

2832. **Simoneit, M.** Deutsches Soldatentum 1914 und 1939. (German soldiery in 1914 and 1939.) *Schr. Polit. Auslandk.*, 1940, No. 63. Berlin: Junker & Dünnhaupt. Pp. 36. RM. 0.80.—[Abstracted review; original not seen.] This paper is by the scientific director of German military psychology, who was a volunteer in 1914. German soldiery of 1914 and of 1939 are both phenomena of the eternal Gestalt of this soldiery, which is based on body, soul (intelligence, will), and mind (values). The soldier's values reconcile freedom with determinism. The 1914 soldier was more enthusiastic, the 1939 soldier is more prepared to face death. Regarding the disintegration of the army in 1918 Simoneit states that the psychological situation at that time was that the troops had lost confidence in their leadership and refused to go on. They were in part the same troops which in former phases of the war had been exemplary fighters. Active resistance arose which turned into hatred and destruc-

tive desperation. Troups and leadership had trespassed the climax of exhaustion.—*H. L. Ansbacher* (Brown).

2833. **Smith, C. N.** Selection, training and morale of Navy personnel. *Ann. Amer. Acad. polit. soc. Sci.*, 1942, 220, 57-66.—The personnel policies of the Navy are described. High morale characterizes the Navy because only volunteers are enlisted; both the officers and men represent a cross-section of American life.—*S. S. Sargent* (Barnard).

2834. **Thorner, M., Gibbs, F. A., & Gibbs, E. L.** Relation between the electroencephalogram and flying ability. *War. Med., Chicago*, 1942, 2, 255-262.—Dysrhythmias of epileptoid type may impair mental function without being obvious to either subject or observer. They may masquerade as carelessness or inexcusable error. Since they occur in about 10% of control subjects, some cases will certainly be found in large groups of aviators. A study of 55 student fliers and 54 pilots shows that flying ability can be correlated with distribution of energy in the right occipital spectrum, the dominant frequency and character of the control electroencephalogram, and the amount of slowing during hyperventilation. Men with B spectra tend to have better flying ability than those with A, but in both groups ability tends to vary with the frequency at which the peak centers. The best position is 10½ per second; displacement to either side is usually associated with decreased flying ability. Although 3 men had definitely epileptoid tracings, there was in general no such wide divergence as is found in a group of epileptics. Even minor divergencies, however, appear to be disadvantageous to fliers. These preliminary data suggest that with correct electroencephalographic criteria a superior group of candidates for flying instruction may be selected.—*M. E. Morse* (Baltimore, Md.).

2835. **Uhlauer, J. E.** The effect of thickness of stroke on the legibility of letters. *Proc. Ia Acad. Sci.*, 1941, 48, 319-324.—This is part of a study dealing with the characteristics for greatest efficiency of highway signs. Two sets of experiments were conducted to determine the optimal stroke for 3-inch block letters (letters whose height and width are equal and whose stroke is the thickness of its individual members). The optimal stroke of such letters was found to be closest to 18% of their width or height.—*B. Wellman* (Iowa).

2836. **Wonderlic, E. F.** Improving interview techniques. *Personnel*, 1942, 18, 232-238.—This is a discussion of methods for improving the technique used in the final employee selection interview. Potentially good interviewers can be obtained by careful selection and then trained in the art of interviewing. 5 methods of teaching interviewing are examined in the light of the author's experience in training interviewers.—*S. G. Dulsky* (Rochester Guidance Center).

2837. **Wren, H. A.** The drives of workers. *Person. J.*, 1942, 20, 317-323.—A worker may aspire to a higher occupational status for increased

power, prestige, or income. The level of vocational aspiration in workers is related to dominance, intelligence, education, present occupational status, familial occupations and income. Some of the characteristics not related are: age, marital status, employment stability, the relative positions of siblings' occupations, abilities not identified with the goal, and the length of supplementary education.—*M. B. Mitchell* (Minnesota).

[See also abstracts 2584, 2585, 2644, 2660, 2710, 2722, 2766, 2777.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

2838. **Aikin, W. M.** The story of the eight-year study, with conclusions and recommendations. New York: Harper, 1942. Pp. 157. \$1.75.—This volume includes a brief report on 1475 students who had graduated from 30 secondary schools where progressive educational methods were applied; entered college in 1936 and after; and were matched for sex, age, background, etc. with students from conventional preparatory schools. Conclusions are: "First, the graduates of the Thirty Schools were not handicapped in their college work. Second, departures from the prescribed pattern of subjects and units did not lessen the student's readiness for the responsibilities of college. Third, students from the participating schools which made most fundamental curriculum revision achieved in college distinctly higher standing than that of students of equal ability with whom they were compared."—*S. S. Sargent* (Barnard).

2839. **Arcan, T.** Motivele alegerii profesiunii. (The motives for selecting professions.) *Rev. Psihol.*, 1940, 3, 303-312.—[Abstracted review; original not seen.] From a synthetic table of motives for selecting professions, it is concluded that selection is largely determined by chance, the influence of parents and friends, and the necessity for earning a living. Generally, young people know very little of the professions they select.—*S. M. Strong* (Minnesota).

2840. **Arsenian, S.** Informing college freshmen of their test scores. *Sch. & Soc.*, 1942, 55, 396-399.—To throw light on R. K. Compton's report of a questionnaire (see XV: 2348) the experience of Springfield College is presented. Entering freshmen are given a battery of tests. A required first year group-guidance course covers problems of orientation, study methods, etc. and then is devoted to vocational guidance, discussing specific occupations and the individual's fitness for them. At this point students are given their profiles, which are interpreted in detail and discussed by the instructor, individual conferences being encouraged. In a questionnaire 90% of the students stated that the profiles had helped in self-understanding and advocated continuance of the procedure. Only 3 stated that it had helped in their educational and vocational planning, which is explainable by the fact

that most students at this college have already made their vocational choice before entering.—*M. Lee* (Chicago, Ill.).

2841. **Barr, A. S., Ewbank, H. L., & McCormick, T. C.** *Radio in the classroom; experimental studies in the production and classroom use of lessons broadcast by radio.* Madison: University Wisconsin Press, 1942. Pp. 203. \$2.00.—This is a report of the Wisconsin research project in school broadcasting. A chapter is devoted to each of the studies conducted: music (grades 5 and 6), geography (grades 6 and 7), nature study and social studies (grades 7 and 8), English and speech (grades 10, 11, and 12). Objective findings yielded mixed results; few of the differences between radio and control groups were statistically significant. Subjective findings—data from questionnaires, letters and interviews—uniformly favored the radio lessons. Evidences of continued interest were increased enrollment, purchase of teacher manuals, and requests for extension of radio facilities.—*S. S. Sargent* (Barnard).

2842. **Bell, H.** *Comprehension in silent reading.* *Brit. J. educ. Psychol.*, 1942, 12, 47-55.—This classroom study considers intelligence, amount of reading done by the pupil, rate of reading, and interest in the test material as factors influencing comprehension in silent reading in a group of 77 secondary school students, average age 15 years 9 months. All except interest correlate positively with comprehension as measured by Stone's Junior High School Test and the Van Wegenen Reading Scales. Most errors occur with incidents forming a part of the story and where difficult inferences are involved. 2 cases of especially poor readers analyzed in detail indicate sources of difficulty and remedial treatment needed.—*R. C. Strassburger* (St. Joseph's College for Women).

2843. **Belser, D.** *Are they ready to read?* *Sch. Exec.*, 1942, 61, No. 8, 16-17; 66.—A discussion of reading readiness, in terms of social, mental, and emotional maturity.—*G. S. Speer* (Central YMCA College).

2844. **Bemis, E. O., & Trow, W. C.** *Remedial arithmetic after two years.* *J. educ. Res.*, 1942, 35, 443-452.—Grade 6A pupils, high enough in intelligence to make success probable, were placed in a remedial class in arithmetic computation for one semester. Their average grade-level score at the beginning of the semester was 5-4 and at the end, 6-3. Over a two-year period, the remedial work was of value to certain pupils and of little or no value to others, using comparison with paired controls as a criterion. There was little evidence of spread of training from computation to reasoning process. Graphs of the progress of individual pupils are given.—*M. Murphy* (Pennsylvania).

2845. **Burnham, P. S.** *Stability of interests.* *Sch. & Soc.*, 1942, 55, 332-335.—Strong's Vocational Interest Blank was given twice to a group of freshmen with one week's elapsed-time interval.

Another group took it in freshman and senior years. The interest scores showed higher stability than college grades but less stability than psychological test scores. There was little relation between change of interest and scholastic measures or type of educational program.—*M. Lee* (Chicago, Ill.).

2846. **Buswell, G. T.** *Organization and sequence of the curriculum.* *Yearb. nat. Soc. Stud. Educ.*, 1942, 41, Part 2, 445-463.—All theoretical positions agree in emphasizing the importance of organization and sequence in curriculum construction. Additional problems basic to the curriculum concern transfer and the curriculum-child relationships. Suggestions are given for constructing a curriculum according to the findings of the psychology of learning.—*P. S. de Q. Cabot* (Simmons).

2847. **Carrigan, M. D.** *Infant readers and vocabulary.* *Brit. J. educ. Psychol.*, 1942, 12, 77.—Abstract.

2848. **Chapman, M. E.** *The speech clinician and the classroom teacher co-operate in a speech correction program.* *J. Speech Disorders*, 1942, 7, 57-61.—The author offers suggestions for classroom teachers who need advice in handling speech problems in schools where no speech clinics are available.—*C. V. Hudgins* (Clarke School).

2849. **Chidester, L.** *Education and our cultural pattern.* *Calif. J. second. Educ.*, 1942, 17, 177-182.—Since about 1 out of every 4 adults receives psychiatric treatment, it is apparent that more attention needs to be paid to personal and emotional maladjustments. Education should deal more explicitly with the problems of interpersonal relationships. It should enable each individual to fit into our intricate civilization without breaking down. Prevention of personal maladjustments, neurotic behavior, and psychotic illnesses lies with education.—*G. S. Speer* (Central YMCA College).

2850. **Cohler, M. J.** *Scholastic status of achievers and non-achievers of superior intelligence.* *J. educ. Psychol.*, 1941, 32, 603-610.—375 6th-8th grade children from 21 schools were divided into 3 groups: achievers, non-achievers, and intermediates. Achievers were those who showed small differences between IQ and achievement in school, non-achievers, those who showed large differences. Mean IQ for the non-achievers was 3 points higher than for the achievers. It is concluded that "even the limited objectives exemplified by standard academic achievement tests are not being adequately realized in the case of the bright pupil. . . . School instruction, as well as social demands and opportunities, come nearer to exploiting one's fullest capacities, the closer those capacities approximate the mean. Thus the child of high intelligence . . . has certain handicaps to good relative achievement which must be compensated for by the force of increased drive. . . . One solution . . . is the use of acceleration to provide more stimulation. . . . In this study some relationship was found between acceleration and relative achievement. . . . School experiences [should] be made so significant that

they would become a more vital factor in child development."—*J. W. Macmillan* (Maryland).

2851. Compton, R. K. Student evaluation of knowing college aptitude test score. *J. educ. Psychol.*, 1941, 32, 656-664.—1331 students in 27 colleges were given their ACE scores and later asked to fill in a questionnaire concerning the effects of the knowledge of the score. Detrimental effects on scholarship aim, scholarship achievement, and emotionality were reported by 4-6% of the students, and on self-regard by 11.7%. Beneficial effects in these specific respects were experienced by approximately 33%, and in general by over 50%. A small number of students changed their course of study and vocational choice, when informed of their mental ability. Students who had overestimated their intelligence benefited slightly less than those who had underestimated it. Negative effects on students of low ability were small. Students value the procedure of receiving objective rating in intelligence more highly when they are adequately counseled. In summary, "college freshmen are sufficiently mature to profit by the knowledge of their mental ability test score."—*J. W. Macmillan* (Maryland).

2852. Dunlop, A. B. Observations on the reading attainment of a group of infant school children in Glasgow. *Brit. J. educ. Psychol.*, 1942, 12, 76-77.—Abstract.

2853. Edmiston, R. W., & Braddock, R. W. A study of the effect of various teaching procedures upon observed group attention in the secondary school. *J. educ. Psychol.*, 1941, 32, 665-672.—Students in 12 schools were watched during classes by trained observers, and their attention was recorded each minute of the class period. 9 different teaching procedures were employed: student reports, demonstration, general discussion (student dominated), general discussion (teacher dominated), workbook, lecture, rapid-fire question and answer, and laboratory. Mean attention scores (percentage of students attending) ranged from 80.60 ± 9.00 for laboratory procedure to 88.20 ± 7.73 for student report procedure. The procedure which presents the best combination of the following attributes should produce the best attention: appropriateness to the learning situation, student participation, thorough previous preparation, definiteness and clearness of assignment to pupil, and combined visual and auditory learning.—*J. W. Macmillan* (Maryland).

2854. Emme, E. E., & Emme, E. M. Recent personnel research significant to vital educational procedures. *Proc. Ia Acad. Sci.*, 1941, 48, 383-393.—This is a review of recent literature on college personnel problems, organized under the following headings: typical negative reactions (by faculty members to personnel procedures), typical favorable reactions, sensing student needs, types of human needs, aims and purposes, understanding human nature, understanding of personality factors, guidance methods, counseling leadership, evaluation. Bibliography of 40 titles.—*B. Wellman* (Iowa).

2855. Emme, E. E., & Patterson, M. Recent research on predicting college success. *Proc. Ia Acad. Sci.*, 1941, 48, 375-382.—This is a brief review of recent literature. Of the 7 criteria discussed, rank in high school graduating class seems to be the best single criterion. A prediction formula based on several factors is recommended as the best method. Bibliography of 47 titles.—*B. Wellman* (Iowa).

2856. Engel, A. M. A study of 3,169 retarded pupils in the Detroit public schools. *Amer. J. ment. Def.*, 1942, 46, 395-401.—Distributions based on children in attendance at the close of the school year 1938-39 show intelligence level, home language, nationality, paternal occupation, home standards, physical defects, age, grade at entrance to special classes, years of special class attendance, and average yearly gain in achievement of pupils in all IQ groups. Approximately 92% of these retarded pupils had IQ's between 50 and 80. Yearly average gain for all academic subjects was about two-fifths of a grade.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2857. Faulkner, R. Evaluation in art. *J. educ. Res.*, 1942, 35, 544-554.—A review of evaluation procedures in art, including: drawing scales, art judgment tests, achievement tests, aptitude tests, and informal evaluation.—*M. Murphy* (Pennsylvania).

2858. Faust, J. F. [Ed.] *The girl's place in life and how to find it*. Urbana, Ill.: McDonnell, 1942. Pp. viii + 214. \$1.30.—This book surveys 19 occupational fields, describing jobs in each. For each occupation it gives the general nature and scope, the qualifications and requirements, employment opportunities, income possibilities, opportunities for promotion and advancement, opportunities for service, individual and group activities intended to expand the information presented here, and a selected reading list. A final chapter suggests ways and means of finding and securing positions.—*G. S. Speer* (Central YMCA College).

2859. Fisher, M. L. A study of the scholastic trends of fraternity men. *Proc. Ind. Acad. Sci.*, 1941, 50, 199-200.—Average grade indexes are reported for successive semesters for fraternity and for non-fraternity men. The higher the scholastic average is at the end of the first semester, the better are the chances of graduating.—*G. R. Thornton* (Purdue).

2860. Fitzgerald, J. A. Some reasons why children are poor spellers. *Cath. Schs J.*, 1942, 42, 126-127.—A brief description of the more common teaching and learning difficulties associated with poor spelling.—*G. S. Speer* (Central YMCA College).

2861. Garrison, K. C. Remedial reading for high school students. *High Sch. J.*, 1942, 25, 28-33.—(Child Develpm. Abstr. XVI: 174).

2862. Gates, A. I., Jersild, A. T., McConnell, T. R., & Challman, R. C. *Educational psychology*. New York: Macmillan, 1942. Pp. xviii + 805.

\$3.00.—Originally intended as a revision of Gates' *Psychology for students of education* (see IV: 4042) and still pointed for those who are preparing to teach, this book is definitely broader in scope than its predecessor. Material pertaining to child development (physical, emotional, social, and mental) was written by Jersild; that pertaining to the measurement and diagnosis of various capacities, aptitudes, and skills, by Gates; that concerning learning (general nature, guidance, development of meanings, reasoning and problem solving, and transfer of training), by McConnell; and that dealing with mental hygiene and clinical psychology of the school child, and the mental health of the teacher, by Challman. "The processes of acquiring meanings, of generalizing, thinking, and problem solving, and the problems of curriculum organization in the school studies and other areas are given far more attention than the principles of economy in rote learning." Written for students who have had an introductory course in psychology, the content is intended not only to inform students but also to stimulate them to think critically of their own problems in terms of present and future research. Questions and exercises, and an evaluated list of supplementary references follow each chapter.—*T. E. Newland* (Penna. Dep. of Public Instruction).

2863. Geyer, D. L., Huggett, A. J., & Marshall, D. K. Current issues in education. Chicago: Werkman's Book House, 1942. Pp. 92. \$1.25.—This brief account of contemporary educational issues proposes methods of furthering the realization of certain democratic ideals through education. It is divided into 4 parts: propaganda and indoctrination, evaluation of instruction, federal aid to education, and a proposal to revive medieval education.—*R. C. Strassburger* (St. Joseph's College for Women).

2864. Gilbert, L. C., & Gilbert, D. W. Reading before the eye-movement camera versus reading away from it. *Elem. Sch. J.*, 1942, 42, 443-447.—Does reading follow a normal course when done before an eye-movement camera? Study of 47 fifth grade pupils when reading at a table and before the camera yielded no significant differences in either reading time or comprehension. Nearly as many of the subjects preferred to read before the camera as at the table.—*S. S. Sargent* (Barnard).

2865. Goldberg, S. Child guidance in a kindergarten-6B elementary school. *Amer. J. Orthopsychiat.*, 1942, 12, 161-175.—The many activities of a unit of the Bureau of Child Guidance in an elementary school are described in some detail to illustrate the various ways in which child guidance workers, functioning in a school system, aid schools to attain desirable educational objectives.—*R. E. Perl* (Jewish Board of Guardians).

2866. Gray, W. S. Summary of reading investigations July 1, 1940 to June 30, 1941. *J. educ. Res.*, 1942, 35, 401-442.—Summary and bibliography of 114 titles.—*M. Murphy* (Pennsylvania).

2867. Greene, P. C. Some relationships between placement scores and scholastic rating. *Proc. Ia*

Acad. Sci., 1941, 48, 361-366.—Correlations between scores on entrance tests and between entrance scores and grade point ratio during the first semester of college work are given for 220 students. The test battery included: American Council on Education examination, Nelson-Denny reading test, Minnesota speed of reading test, English placement test for Iowa universities and colleges, and the Seashore pitch and rhythm discrimination tests. The relationships obtained were within the range of those usually obtained. They were of limited utility in the prediction of scholastic rating of an individual. The American Council test is useful mainly in comparison of the local group with the national sample and in giving some estimate of the student's relative rating in verbal and numerical facility.—*B. Wellman* (Iowa).

2868. Hamilton, S. L. What it takes to make good in college. *Publ. Affairs Pamph.*, 1941, No. 53. Pp. 32.—This pamphlet is based on the findings summarized in the book *From school to college*, edited by Hugh Hartshorne (see XIII: 3295). It analyzes the factors related to college success in the areas of health, scholarship, finance, family and home, religion, morals and discipline, personality, social relations, living conditions, and outreach. The highest degree of success was found to be associated with 4 behavior patterns: purpose, social adjustment, decision, and sensitivity. Cases are described which illustrate the importance of these patterns in adjustment to this transition period. The specific responsibilities for building up these response habits are indicated for the home, the schools, the colleges, the churches, and the student himself.—*F. W. Finger* (Virginia).

2869. Hansen, R. The three R's of handwriting. *Train. Sch. Bull.*, 1942, 39, 2-8.—Following an analysis of the muscles involved in writing, suggestions are offered about training the motor-retarded child to write. Smooth reciprocation of muscles and rhythmical relaxation are important.—*M. W. Kuenzel* (Children's Home, Cincinnati, O.).

2870. Henry, N. B. [Ed.] Yearbook of the National Society for the Study of Education. Part II. The psychology of learning. Bloomington: Public School Publishing Co., 1942. Pp. xiv + 502. \$2.50.—The purpose of this yearbook is: (1) to present authoritative and concise statements of 3 influential theories, of human learning: conditioning, connectionism, and field theory; (2) to show that these theories have fundamentally much in common to serve as a basis for constructive educational thinking and practice; (3) to indicate the complementary nature of these theories; and (4) to present "a discussion of some of the more important phases and conditions of human learning which are particularly significant for education," such as motivation, emotional behavior, practice, language and meaning, problem solving, and the curriculum. For individual contributions see XVI: 2537, 2600, 2603, 2609, 2611, 2614, 2616, 2618, 2625, 2626, 2630, 2765, and 2846.—*P. S. de Q. Cabot* (Simmons).

2871. Hilgard, E. R. Success in relation to level of aspiration. *Sch. & Soc.*, 1942, 55, 423-428.—Hoppe and others have shown in laboratory tasks that level of aspiration is related to preceding success. Sears measured this relationship in a real life situation, namely in children who have had a history of success or failure in reading and arithmetic. The successful children consistently tried for scores close to, or slightly better than those just achieved. The others showed undesirable and unpredictable goal-setting behavior, expecting high success on a fantasy basis or even less success than previously attained. Educators should make every effort to keep goals realistic and attainable and reduce social pressure toward those that are unattainable. Individually suitable, though relatively low life goals, must be made dignified and respected.—*M. Lee* (Chicago, Ill.).

2872. Hopkins, P. *Aids to successful study*. London: Allen & Unwin, 1941. Pp. 164. 5s.—[Abstracted review; original not seen.] Reflecting the inspiration of Spearman's theoretical views and experimental researches, this volume presents the essentials of a course designed to promote efficiency in study. Part I includes ways of learning, memory and memorizing, work and time schedules, technique of study, and intelligent arrangements. Part II considers emotionality, health and the senses, will, habit, cooperation, and independence.—*R. C. Strassburger* (St. Joseph's College for Women).

2873. Hubbard, E. V. *Your children at school—how they adjust and develop*. New York: John Day, 1942. Pp. xvi + 176. \$2.75.—Out of her 20-odd years' experience in teaching young children the author gives a record of child life in school. "My first desire is to make them feel assured, belonging, important, and necessary. My second is to let them express that delicate creative urge which each has to some degree but which too often is not fostered. And then I would like to give them all the knowledge that they crave as they are ready for it, cautiously feeling my way." Opening chapters describe the first day and the first month at school. Then follow chapters on social and psychological adjustments, creative expression, trips and experiences, shop work, nature interests, reading and writing, and number work. Many of the children's own songs, drawings, poems, and reports are included.—*S. S. Sargent* (Barnard).

2874. Lamb, H. An inquiry into (1) the relative popularity of technical and expressional methods of handwork teaching, and (2) their effect on character development. Part I. *Brit. J. educ. Psychol.*, 1942, 12, 26-34.—To assess the relative merits of the technique course aiming at the achievement of technical proficiency in woodwork and the content course of a less rigorous nature allowing for freer expression of personal interests with technique of subordinate value, 2 groups of 20 boys each, equated on the basis of IQ, were formed and taught by the respective methods. The masters' observations of voluntary attendance and general behavior and pupil opinions clearly favored the content course.

In the judgment of 12 additional handwork masters queried, the content course had a more beneficial effect on the character development of the pupils.—*R. C. Strassburger* (St. Joseph's College for Women).

2875. Lee, H. E. Speaking of failures. *Engl. J.*, 1942, 31, 321-324.—33 high school seniors, from homes in which a foreign language was spoken, were matched by Otis IQ with 33 seniors from homes in which only English was spoken. The groups were compared in general scholastic average; items of school and out-of-school activities, responsibilities, and plans for the future; average English grade; social-economic status; and civic attitude. General scholastic achievement and average English grades were found to be approximately the same. Social-economic level affected grades more than language conditions; foreign language spoken at home was not a necessary cause of failure in English.—*G. S. Speer* (Central YMCA College).

2876. Long, D. C. School-leaving youth and employment. *Teach. Coll. Contr. Educ.*, 1941, No. 845. Pp. vii + 84.—A survey of 898 white, unemployed youth who left school at or before high school graduation between 1934 and 1938 revealed that sex is a prime factor in occupational adjustment. Deviation from the traditional family pattern is related to a lower percentage of employment among the boys and a higher percentage of employment among the girls. No relationship was found between tenure of employment and intelligence. Bibliography of 62 titles.—*L. Birdsall* (Coll. Ent. Exam. Board).

2877. Moore, H. *A practice manual in vocabulary building*. New York: Psychological Corporation, 1941. Pp. 78. \$1.00.—This manual is designed for use in high schools and colleges. In the introduction the author discusses the value of a good vocabulary, the origins of the English language, the analytic method of vocabulary building, and the value of this method. There follow 15 exercises based upon the analytic method, also blanks for a vocabulary building record.—*L. M. McCabe* (Cambridge, Mass.).

2878. Parham, L. C. Out-of-school environments and activities of junior high school pupils. *Social Educ.*, 1942, 6, 27-30.—(*Child Dev. Abstr.* XVI: 104).

2879. Parry, D. F. Reading gains in a freshman remedial program at Syracuse University. *J. educ. Psychol.*, 1941, 32, 624-630.—21 students entered a remedial reading course with an average reading level at the 10th grade as measured by standardized reading tests. "Remedial work was designed primarily for immediate improvement in the students' course work rather than in ultimate reading test gains. . . . The course was a no-grade, non-compulsory, non-credit course, and students enrolled were carrying a full fifteen-hour schedule. . . . After 31 hours of testing and remedial work the average student in the class was reading more efficiently than seventy-three per cent of 12th grade students and average or above for 13th grade

students. In terms of reading skills, the mean gain of 36 centiles represents a growth of three or more grade-years in school, as measured by standardized reading tests."—*J. W. Macmillan* (Maryland).

2880. Peters, H. B. The influence of orthoptic training on reading ability. Part I. Introduction and review of literature. *Amer. J. Optom.*, 1942, 19, 95-111.—Two lines of investigation have been followed in attempts to discover the rôle of visual functions in determining reading efficiency: the measurement method of statistical correlation, and the habits training method designed to develop correct eye movements in reading. As a third approach the orthoptic method is proposed which aims at the development of generally efficient visual mechanisms, so that peripheral hindrances to efficient reading would be removed. The first two approaches have not yielded reliable correlations between visual functions and reading abilities, but it does appear that visual disabilities may retard reading achievements, and that improvement tends to follow their correction. Investigators have not agreed upon the value of training directed to control of eye movements.—*M. R. Stoll* (Lowell, Mass.).

2881. Prindle, A., Reichart, R. R., & Laslett, H. R. Two test-retest experiments on knowledge of the English language. *J. educ. Psychol.*, 1941, 32, 681-687.—1359 freshmen and 353 seniors were tested with the 1936 edition of the Oregon State College English Placement Test which consists of spelling, grammar and usage, recognition of sentence elements, and punctuation sections. 170 seniors had taken the same test as freshmen; they showed a mean gain of 8 points, with wide individual differences. There was considerable overlapping of senior and freshmen scores, both groups being poorest in spelling and parts of speech sections. "The problem of training college and university students in the elements of English composition is serious, but . . . it is little or no more serious in English than in the other subjects which have been measured in a similar manner in other studies. It is to be hoped that the seniors have more functional knowledge than the freshmen even though they appear to have little more factual knowledge."—*J. W. Macmillan* (Maryland).

2882. Ralya, L. L., & Ralya, L. L. Some significant concepts and beliefs in anthropology and biology of entering college freshmen and the relation of these to general scholastic aptitude. *Sci. Educ.*, 1941, 25, 314-320.—(*Child Developm. Abstr.* XVI: 180).

2883. Richards, I. A. How to read a page; a course in efficient reading with an introduction to a hundred great words. New York: Norton, 1942. Pp. 246. \$2.50.—Reading is considered "a matter of organized comparisons between meanings." Opportunities for improving this process of organization or systematization are presented in the form of "translating" various passages from ordinary English to Basic English, while carefully introspecting on the process. The ambiguity, or usefulness for

many purposes, of the 100 most important words presented is stressed.—*A. Thomsen* (Elmo Roper, Market Research).

2884. Roe, V., & Milisen, R. The effect of maturation upon defective articulation in elementary grades. *J. Speech Disorders*, 1942, 7, 37-50.—Speech tests were given to 1989 unselected school children in grades I-VI. The children were questioned concerning pictures which they were given to examine. Their responses were scored by the examiner on prepared forms. Data are presented in tables showing the number, percentages, and types of errors made by pupils in the individual grades. The number of errors decreased as the grade level increased. This decrement was significant, however, only in the lower grades, indicating that maturation does not effect a noticeable improvement in the upper grades. Tables showing the relative difficulty of individual sounds, as determined by the frequency of errors, are intended to aid both the speech teacher and the teacher of beginning reading. A list of suggestions for further study is included. A detailed analysis of error types is given in an appendix.—*C. V. Hudgins* (Clarke School).

2885. Rogers, H. W. Graduate-school attendance and the intelligence of the undergraduate. *Sch. & Soc.*, 1942, 55, 370-371.—The average scores of entering freshmen were compared with the percentage of graduates of the same institutions in graduate schools at the time. Excluding theological students and those of colleges of a specific religious denomination, where no such relationship obtains, the correlation is .46 for medical and legal students and graduate departments, which finding supports a claim by Kunkel.—*M. Lee* (Chicago, Ill.).

2886. Segel, D., & Proffitt, M. M. Pupil personnel services as a function of the state departments of education. *U. S. Off. Educ. Bull.*, 1940, No. 6. Pp. vi + 84.—This monograph deals with the historical development, function, and activities in the pupil personnel area. It covers the following topics: compulsory school attendance, school census, child labor, guidance, evaluation, and measurement. The work being done by representative states in furnishing guidance, in evaluating the school program, and in constructing tests (or examinations) is also described.—*L. Long* (City College, New York).

2887. Shartle, C. L. Vocational guidance and job families. *Occupations*, 1942, 20, 506-508.—A description of the method of establishing job families, and of their value in vocational guidance.—*G. S. Speer* (Central YMCA College).

2888. Smith, J. M. The prognostic value of entrance tests in a junior college. *J. educ. Psychol.*, 1941, 32, 584-592.—267 students in a junior college were given Thurstone, Bell, and Iowa Reading tests. Scores obtained were compared with high school and college grade point averages. "The high-school G.P.A. is outstanding among the measures available at the time of registration for its predictive value." G.P.A. (high-school) and college grades correlated

.707 for one year, .668 for two years. Thurstone test and college G.P.A. correlated .441 and .465 for one and two years. Passing and failing students were differentiated most clearly by average high-school grades, rather well by ACE (Thurstone) scores, somewhat by Iowa Reading scores, and not at all by Bell scores.—*J. W. Macmillan* (Maryland).

2889. **Stauffer, R. G.** *A study of prefixes in the Thorndike list to establish a list of prefixes that should be taught in the elementary school.* *J. educ. Res.*, 1942, 35, 453-458.—A study of Thorndike's *Teacher's word book of 20,000 words* (see V: 2953) showed that 24% of these words have prefixes. 15 prefixes account for 82% of the total number. The frequency of occurrence of these is analyzed. The entire list of prefixes used in the study is also given with assimilated forms, common meanings, and illustrative words.—*M. Murphy* (Pennsylvania).

2890. **Steckle, L. C.** *The utility of the instructor's rating scale.* *J. educ. Psychol.*, 1941, 32, 631-635.—A rating scale of 22 true-false items for students in rating their teachers is given with an example of its use by the author over a 3-year period. "If the instructor can survive the blow to ego that most initial rating scale results evoke, he becomes in a position more closely to approximate the ultimate goal in teaching; that of 'making the material functional in the lives of the students'."—*J. W. Macmillan* (Maryland).

2891. **Stone, C. R.** *A vocabulary study based on 107 primary grade books.* *Elem. Sch. J.*, 1942, 42, 452-455.—"Independence in reading material of a level comparable with that of the typical new third readers of today requires a workable mastery of a relatively large vocabulary . . . [which] cannot be introduced in the usual five-book series of primary-grade readers without a too-heavy vocabulary load."—*S. S. Sargent* (Barnard).

2892. **Strang, R.** *Developing reading potentialities of high school students.* *Teach. Coll. Rec.*, 1942, 43, 468-488.—The author describes methods which were tried out in various junior high school and 9th grade classes for teaching reading to slow-learning pupils, students having difficulty in reading science books, and students with general reading disabilities. Certain general principles are outlined. Factors of importance are motivation, interest, practice, attention to specific individual difficulties, and the social aspects of reading. Footnote bibliography of 43 titles.—*L. Birdsall* (Coll. Ent. Exam. Board).

2893. **Stroud, J. B.** *A critical note on reading.* *Psychol. Bull.*, 1942, 39, 173-178.—(1) An average correlation of about .40 is generally reported for reading speed and comprehension, but speed is implicated in the latter. The correlation between level-of-comprehension (as against speed-of-comprehension) and reading speed is .17. The real problem is the relationship between reading speed and amount learned, and these two measures have been found virtually unrelated. (2) 8-10 fixations per line in the reading of the average mature individual is more nearly correct than the customary

report of 5-6. This smaller figure was obtained on short lines and easy material rather than typical adult reading material.—*F. McKinney* (Missouri).

2894. **Studebaker, J. W.** *Vocational guidance in wartime.* *Occupations*, 1942, 20, 487-492.—The author states that the present emergency only emphasizes what has long been stressed by vocational counselors and presents 5 goals for vocational guidance.—*G. S. Speer* (Central YMCA College).

2895. **Templeman, W. D.** *Vocabulary and success in college.* *J. higher Educ.*, 1942, 13, 213-215.—The scholastic point averages for the first semester of freshmen at the University of Illinois were compared in tabular form with their total scores on an objective test of rhetoric (which every entering freshman takes) and with their scores on the vocabulary part of the test. It was found that both the total score and the vocabulary score had value for predicting scholastic point average, the vocabulary score serving just about as well as the total test score. The finding "provides new evidence to be used in impressing upon high-school and college students the importance of a good vocabulary."—*R. A. Brottemarkle* (Pennsylvania).

2896. **Terman, L. M.** *The vocational successes of intellectually gifted individuals.* *Occupations*, 1942, 20, 493-498.—This is the latest report on the vocational, social, marital, and economic progress of the 1425 gifted children first studied in 1922. With wide individual differences, the group as a whole exceeds the general population in mortality rate, divorce rate, economic success, occupational classification, and education. Intellect and achievement are not at all perfectly correlated. The most important factors in determining success have been a drive to achieve, personality adjustment or emotional stability, happiness of temperament, and freedom from excessive frustration.—*G. S. Speer* (Central YMCA College).

2897. **Thomson, G. H., & Lawley, D. N.** *New norms for Ballard's reading and arithmetic tests for seven-year-olds.* *Brit. J. educ. Psychol.*, 1942, 12, 56-58.—The norms reported represent the performances on 2605 children, ages 7.0 to 7.11, on the Ballard One Minute Reading Test, One Minute Oral Addition Test, and One Minute Oral Subtraction Test. The conversion tables permit the translation of scores into equivalent 'quotients' of average 100 and SD 15, to agree with the Binet quotients.—*R. C. Strassburger* (St. Joseph's College for Women).

2898. **Tyler, L. E.** *The measured interests of adolescent girls.* *J. educ. Psychol.*, 1941, 32, 561-572.—This study is based on results obtained with the author's Minnesota Interest Test for Girls, which differentiates between the interests of high school girls taking college preparatory (CP), commercial, and general courses. This interest test and the ACE, the Kirkpatrick, and the Terman and Miles MF test were given to 353 12th grade girls. Relationships were shown to exist between interest scores and socio-economic and educational levels of the home;

and between CP interest score and ACE, MF, and Kirkpatrick scores. A high negative correlation between CP and commercial interest scores was found. Fear and wickedness sections of the MF test were most closely related to CP interest scores. "Special scales based on these differentiating sections and items produced much higher correlations with CP score than had total scores on the MF and Kirkpatrick scales." Emotional reactions, independent attitudes, and general intelligence account for about $\frac{1}{2}$ of the variance in CP score.—J. W. Macmillan (Maryland).

2899. Wittich, W. A. **A number-readiness test.** *Sch. Exec.*, 1942, 61, No. 7, 11-13.—The development of a test to measure number-readiness in entering first grade children is described. Results from the use of the test in 3 schools are referred to the usual concepts of children's knowledge of numbers, and to the usual curriculum. Children come to school with much more number ability and information than is generally assumed. Greater emphasis should be put on number readiness as well as reading readiness.—G. S. Speer (Central YMCA College).

2900. Worbois, G. M. **A language test of children in differential rural environments.** *Proc. Ia Acad. Sci.*, 1941, 48, 345-348.—All of the 4th, 5th, and 6th grade children within an arbitrarily defined rural area were selected for study; 68 of the children went to a consolidated school and 60 to one-room schools. A language test built around the words capitalism, conscription, inflation, national defense, and new deal was administered. The total group and the children in the 6th grade of the consolidated school were found to be significantly superior to the children in the one-room schools.—B. Wellman (Iowa).

2901. Wrenn, C. G., & Humber, W. J. **Study habits associated with high and low scholarship.** *J. educ. Psychol.*, 1941, 32, 611-616.—The Wrenn Study Habits Inventory was administered to 50 pairs of men and women students, one of each pair being in the upper 20% of the class, the other in the lower 40%. The members of each pair were equated on the basis of ACE score, academic load, sex, academic experience, and pattern of course work. 27 items of the Inventory were found to differentiate between successful and unsuccessful men students and 11 items, between successful and unsuccessful women students. "The largest share of these items was concerned with examinations, distribution of time, sociability, and concentration, while habits in the areas of study environment and health contributed but few significant items."—J. W. Macmillan (Maryland).

[See also abstracts 2531, 2552, 2603, 2607, 2611, 2612, 2618, 2625, 2626, 2628, 2631, 2736, 2765, 2778, 2786, 2917, 2921.]

MENTAL TESTS

2902. Bijou, S. W. **The psychometric pattern approach as an aid to clinical analysis—a review.**

Amer. J. ment. Def., 1942, 46, 354-362.—The empirical findings reported in the literature show the meaning and usefulness of test patterns. Particular reference is made to the patterns of psychotics, recidivists, delinquents, mental defectives, and school children. 19 references are cited.—M. W. Kuenzel (Children's Home, Cincinnati, O.).

2903. Davis, E. A. **The concept of "highest Binet attainment" applied to unselected clinical cases.** *J. educ. Psychol.*, 1941, 32, 697-703.—"The mean increase in IQ for 367 . . . cases when tests were rescored by the 'highest Binet attainment' method was about 19 points." The greater gain was made: by the older and brighter subjects, by boys, by subjects with reading disability, by subjects whose Arthur Performance IQ was lower than the Stanford IQ.—J. W. Macmillan (Maryland).

2904. Maxfield, F. N. **Psychometric scores and the general public.** *Amer. J. ment. Def.*, 1942, 46, 323-324.—The use of the unqualified term "mental age," since it is ambiguous, should be discarded, and IQ's as scores should also be distinguished from intelligence as an abstraction.—M. W. Kuenzel (Children's Home, Cincinnati, O.).

2905. McRae, H. **The inconstancy of group test IQ's.** *Brit. J. educ. Psychol.*, 1942, 12, 59-70.—To study the effects of coaching and practice on test performance, a series of mental tests, augmented in some instances by special coaching, was given at weekly intervals to 6 parallel groups of pupils numbering originally 30 each. Evidence of a practice effect equivalent to a median increase of more than 6 IQ points was noted. Coaching was no more influential than practice, except where it involved the use of an alternative form immediately before the examination. "Even one preliminary test does much to offset the effect of previous practice or coaching." The marked variations observed in individual IQ's over the test series were investigated in a further inquiry using a larger group, ages 9-12, which had been tested on the revised Stanford-Binet scale. Group tests administered at weekly periods showed an average improvement, but this did not hold true of the individual scores, which were inconsistent. The first 2 tests of a series are sufficient to eliminate all practice effect. "One cannot too strongly deprecate the custom, where any stress is to be laid upon the result, of giving only one group test of intelligence."—R. C. Strassburger (St. Joseph's College for Women).

2906. Spache, G. **Serial testing with the revised Stanford-Binet scale, Form L, in the test range II-XIV.** *Amer. J. Orthopsychiat.*, 1942, 12, 81-87.—Serial testing offers economy of procedure and time, opportunity to avoid emotional stress by arranging successions of successes or failures, and avoidance of certain sequences which are conducive to misinterpretation by the subject. The author abstracted from the long scale a series of items suitable for serial testing. This serial scale compares very favorably with the short scale recommended by Terman and Merrill in the similarity of its mean

MA's and IQ's to those of the long scale, in the range of differences and the median differences between its results and those of the long scale, and in the range of successes and the incidence of inversions.—R. E. Perl (Jewish Board of Guardians).

2907. Spache, G. **Deriving language and non-language measures of intelligence from the Kuhlmann-Anderson intelligence tests.** *J. educ. Psychol.*, 1941, 32, 673-680.—"The intelligence of children handicapped in reading is prone to be underestimated when determined by individual or group measures of verbal intelligence." Correlations with the California Test of Mental Maturity show that "seventeen of the twenty-five tests for which data are available are more closely related to the language section of the California test, and may be tentatively identified as measures of verbal intelligence. The remaining 8 tests may be similarly identified as non-verbal measures." The relationship between language and non-language tests and reading abilities as measured by reading tests is not distinct.—J. W. Macmillan (Maryland).

2908. Thomson, G. H. **Following up individual items in a group intelligence test.** *Brit. J. Psychol.*, 1942, 32, 310-317.—The author describes the follow-up of 752 children in relation to their scores on 100 individual items of the Moray House group verbal intelligence test. A year after the test, the secondary and intermediate school children were each divided by their respective schoolmasters into 3 groups: good, medium, and poor. A diagram was then made for each test item showing what proportion of each of the 6 groups of children had succeeded in that item. It appeared that it was not so much the type of item which was of predictive significance, as its difficulty value. Moreover, the predictive power of the test within the secondary school is not usually the best indication of its power to separate the potential secondary school pupils from those not suitable for (academic) secondary school courses. The general conclusion is that "discrimination within a highly selected group [such as that which had taken the test] may be small even though (or indeed just because) the instrument of selection has been efficient."—M. D. Vernon (Cambridge).

CHILDHOOD AND ADOLESCENCE

2909. Akerman, D. S. **The critical evaluation of the Viennese tests as applied to 200 New York infants six to twelve months old.** *Child Developm.*, 1942, 13, 41-53.—200 children, aged 6-12 months, representative of an urban population, were tested with the relevant Buehler items. The average developmental quotient (DQ) of this New York group was higher than that of Buehler's institutional Vienna group. The distributions for the total New York group and for each of the 4 age groups closely approximated a normal curve. DQ's for the total test and for various sub-tests are presented for each age group. The reliability of the schedule, studied in several ways, seemed satisfactory. Certain group differences (race, environment, etc.)

are given and discussed. From an item analysis it was determined that certain items were unsatisfactory, and suggestions are made for the replacement of these items as well as for the clarification of instructions for administration in other instances.—C. N. Cofer (George Washington).

2910. Allen, F. H. **Dynamics of roles as determined in the structure of the family.** *Amer. J. Orthopsychiat.*, 1942, 12, 127-135.—The author is concerned with the function of the family as a determiner of roles, which are different from, but must be lived in relation to each other. The emphasis is on the rôle of the child as it gains its direction and meaning through the functioning of the adult roles of father and mother, who, at the same time, are husband and wife.—R. E. Perl (Jewish Board of Guardians).

2911. Balken, E. R., & Vander Veer, A. H. **The clinical application of a test of imagination to neurotic children.** *Amer. J. Orthopsychiat.*, 1942, 12, 68-81.—40 children from 5 to 15 years of age referred to the Psychiatric Division of the University of Chicago Clinics for the diagnosis and treatment of a variety of neurotic symptoms acted as subjects. Test materials consisted of 12 pictures suggesting conflictual situations to which a variety of phantasies could readily be associated. Excerpts from case reports are presented to illustrate the variety of factors determining the form and content of the phantasies and the way in which they reflect the patient's past emotional conflicts, his defenses against them, and the present reality situation.—R. E. Perl (Jewish Board of Guardians).

2912. Barker, R. G. **An experimental study of the resolution of conflict by children.** In *McNemar, Q., & Merrill, M. A., Studies in personality*. New York: McGraw-Hill, 1942. Pp. 13-34.—Making every effort to create conflict situations undisturbed by discriminative difficulties, the author presented 19 boys, aged 9-11, with sequences of 42 pairings of 7 liquids, in both "real" and "hypothetical" situations. The experiment is concerned with time elapsing and amount of VTE behavior occurring during the resolution of conflict in 3 situations. The situations are discussed in terms of concepts and notations developed by Lewin. More specific assumptions are developed to account for the observed behavior, and the results interpreted in the light of these assumptions.—G. S. Speer (Central YMCA College).

2913. Brill, N. Q., & Seidemann, H. **The electroencephalogram of normal children; effect of hyperventilation.** *Amer. J. Psychiat.*, 1941, 98, 250-255.—100 normal children of the ages 4-14 were studied. "Alpha frequency increased and the incidence of slow activity diminished with advancing age, with a critical level being reached at the age of 9½. There was a marked tendency toward the development of dysrhythmia during hyperventilation in the younger children, which diminished with advancing age."—R. Goldman (Boston Psychopathic Hospital).

2914. Bronner, A. F. **The young adolescent in a world at war.** *Wom. Pr.*, 1942, 36, 178-179.—As the

war situation becomes more involved, adolescents may be expected to be less well controlled and more excitable than is even normal. By offering wholesome interests, opportunity for engaging with others in wholesome activities, and by finding outlets for adolescent urges, young people can be helped not merely to meet the excitements and insecurities of the present but to be ready to face intelligently the realities of life that lie ahead.—*V. W. Lewis* (National Board YWCA).

2915. **Bronstein, I. P., Wexler, S., Brown, A. W., & Halpern, L. J.** *Obesity in childhood: psychologic studies.* *Amer. J. Dis. Child.*, 1942, 63, 238-251.—The following tests were given to 35 obese children: Stanford-Binet, Stanford Reading and Arithmetic Achievement, Pinter Aspects of Personality, and Terman-Miles Attitude-Interest Analysis Scale, Form B. Intellectually the children were found to be slightly superior (median IQ of 109), while emotionally they tended to be unstable and introverted. The achievement tests did not reveal any real difference between the obese children and other children of the same intellectual level. No marked tendency toward femininity was found on the Terman-Miles scale.—*L. Long* (City College, New York).

2916. **Bucklew, J., Jr.** *Marital dominance: its effect on the child.* *Proc. Ind. Acad. Sci.*, 1941, 50, 192.—Abstract.

2917. **Cronbach, L. J.** *The wartime morale of youth; an analysis of the school's problem.* *Sch. & Soc.*, 1942, 55, 303-308.—One week after the Reuben James was sunk social-studies teachers in 4 high schools asked senior students to write answers to the following question: "If the United States enters the war, how will your life be affected, both during the war and permanently?" The answers showed that the majority has no clear idea of the probable effects of war or the possibility of overcoming or adjusting to its entailed difficulties. Many children have groundless fears and lack a sense of proportion. About one third take an emotional attitude. In general there is a lack of awareness of what their rôle could be to help; few mentioned civilian defense and almost none the purchase of defense bonds. The schools could do much to offset the previous indoctrination against war and to give a basis for clear thinking. To this end pupils' attitudes should be determined and weak spots located.—*M. Lee* (Chicago, Ill.).

2918. **Elliot, M. M.** *The effect of war and civil defense on children: the British experience.* *Social Serv. Rev.*, 1942, 16, 1-36.—This paper reviews the psychological effects of war and defense activities on British children. A marked increase in juvenile delinquency, particularly in the group under 14, has occurred, with a greater percentage increase in girls than boys. From 10 to 15% of the evacuated children developed difficulties: enuresis, psychosomatic difficulties, petty delinquencies, psychoneurotic disorders, or other asocial behavior. The morale and general emotional condition of children

were very good, and the effects of bombings were less than had been anticipated. In general, those who developed psychoses or neuroses had histories of previous disturbances or behavior difficulties, or were insecure in their own homes. Even very young children exhibited typical psychoses or anxiety neuroses. Children of 6 or 8 years reacted most favorably. The development of various types of placement for evacuated children is described, and general recommendations are made for similar provisions in this country. A list of specific recommendations, based on British experience, is given to meet the wartime needs of children. Particular emphasis is placed on recreational facilities and supervision.—*G. S. Speer* (Central YMCA College).

2919. **Gardner, G. E.** *Ambivalence as a factor in home placement failure.* *Amer. J. Orthopsychiat.*, 1942, 12, 135-140.—Although psychiatric study and treatment is impossible for all cases facing initial foster home placement, it is especially important before the initial placement of children in the early adolescent years. The detection of extreme ambivalent feelings toward the parents must be given proper consideration in the choice of group or foster home placement and in determining the need for intensive treatment before or continued treatment after placement or both.—*R. E. Perl* (Jewish Board of Guardians).

2920. **Goldfarb, W.** *Personality trends in a group of enuretic children below the age of ten.* *Rorschach Res. Exch.*, 1942, 6, 28-38.—"The behavioral tendencies of 8 enuretic children between about 7 and 10 years of age have been examined, using 3 different approaches. Interpretations based on the Rorschach examination are validated in the main by the impressions of case workers and objective observations of each child in a test situation." 6 children show a pattern of strongly aggressive behavior, 2, one of fear and withdrawal. Emotional immaturity is indicated in all cases. A fuller and better controlled study of a larger sample should be made.—*R. E. Horowitz* (New York City).

2921. **Henry, L. K., & Brand, M. J.** *An extension of Kirkendall's study of incentives in the motivation of children.* *Proc. Ia Acad. Sci.*, 1941, 48, 337-343.—The Kirkendall questionnaire on the influence of certain incentives (see XII: 6685) was answered by 423 pupils in grades 7 through 12 in four schools. Results are presented in terms of the percentage of each sex and grade group checking choice A of each item.—*B. Wellman* (Iowa).

2922. **Hermann, I.** *Die sexuelle Latenzperiode des menschlichen Kindes.* (The sexual latency period in the human child.) *Z. Kinderpsychiat.*, 1941, 8, 97-102.—The theory of sexual latency states that sexual development in the human child is not an uninterrupted process but is divided into 2 periods. The first of these extends from birth up to about the age of 5 years; the second begins at pubescence and continues into maturity. Between these periods is a time when little or no further sexual development takes place. Freud believed that this

period of sexual latency indicated that the phylogenetic origin of the human race could be traced backward to an earlier primate form that became sexually mature at about the age of 5 years. In an attempt to verify this point, the present author has searched the available literature for data on the age at sexual maturity of apes and monkeys. He reports a fairly regular series of decreasing ages from the gorilla and chimpanzee, which are said to mature between the ages of 8 and 12 years, down to the smaller and less highly organized species that become mature at the age of 2 or 3 years. Freud's explanation thus does not appear to accord with the known facts.—F. L. Goodenough (Minnesota).

2923. Hertz, M. R. **Evaluation of the Rorschach method and its application to normal childhood and adolescence.** *Character & Pers.*, 1941, 10, 151-162.—After surveying the literature on the Rorschach method, 37 titles of which are appended, the author concludes that despite subjectivity of scoring, sparsity of norms, reliance upon clinical validation, and other limitations the method is pragmatically valid for normal children. Furthermore, it may prove to be of some value in the clinical field. But if it is to be used as a research instrument, its validity must be established scientifically. Thus far, such research has scarcely scratched the surface.—M. O. Wilson (Oklahoma).

2924. Hirschberg, G., & Gilliland, A. R. **Parent-child relationships in attitude.** *J. abnorm. soc. Psychol.*, 1942, 37, 125-130.—A positive relationship was found between the attitudes of children and both of their parents in all the attitudes that were studied. The relationship was strongest in the attitude toward the New Deal, less in the attitude toward fascism, and weakest in the attitude toward God. The mothers had a closer relationship with their children than did the fathers. Sons had a closer relationship with both parents than did daughters in their attitudes toward the New Deal and God, and an equal relationship, in their attitude toward fascism. The degree of relationship between attitudes of parents and children depends upon the home situation, the subjects tested, and the attitude studied.—C. H. Johnson (Portland, Ore.).

2925. Irwin, O. C. **The developmental status of speech sounds of ten feeble-minded children.** *Child Develpm.*, 1942, 13, 29-39.—Consonant and vowel sounds were transcribed (from 30 breath samples) at two sessions separated by a year with each of 10 low-grade feeble-minded children whose average age was 3 years at the time of the first transcription. Only one case (age 5½ yrs.) evidenced meaningful speech patterns. Front vowels were used by the S's more often than back vowels, and they had not mastered all the vowels or consonants. The vowel-consonant ratio for the group is 1, whereas for adult speech it is 1 to 2. The distribution of consonant articulation in the feeble-minded is different from that for normal infants and adults. "The developmental status of the speech sounds of the group of four-year-old feeble-minded children

approximates that of normal children less than one year of age."—C. N. Cofer (George Washington).

2926. Kersten, O. **Praxis der Erziehungsberatung.** (Practice of educational guidance.) Stuttgart: Enke, 1941. Pp. xii + 551.—[Abstracted review; original not seen.] Educational guidance is more than education, and a great responsibility therefore rests upon the person who undertakes this task. He should be thoroughly acquainted with the normal course of child development as well as with its aberrations. The book attempts to supply this information. The appendix includes a number of special articles on diverse topics, such as one on advice to parents written by the head of the Berlin police department; a chapter on bedwetting for the instruction of parents; and another, for the bedwetter himself. There is an extended bibliography, all of which is in German.—F. L. Goodenough (Minnesota).

2927. Knoepfmacher, J. **The use of play diagnosis and therapy in psychiatric case work.** *Smith Coll. Stud. soc. Work*, 1942, 12, 217-262.—The author summarizes the Freudian theory in regard to the function of play, and shows the ways in which it may be used in the treatment of children's psychological disorders. Play therapy is not a definable method and requires a highly individualized approach. Therefore, it may fail to help the child overcome his difficulties if not safeguarded by psychiatric and case-work supervision. Bibliography.—K. S. Yum (Chicago).

2928. Lambert, J. P. **Psychiatric observations on children with abdominal pain.** *Amer. J. Psychiat.*, 1941, 98, 451-454.—For the majority of these patients relatively difficult home situations were revealed. Every child associated or correlated the pain with emotional attitudes or feelings (fear anxiety, insecurity). The generally better than average level of intelligence of the children with this type of disorder was a distinct asset in working with them.—R. Goldman (Boston Psychopathic Hospital).

2929. Lurie, L. A., Rosenthal, F. M., & Outcalt, L. C. **Diagnostic and prognostic significance of the differences between the intelligence quotient and the social quotient.** *Amer. J. Orthopsychiat.* 1942, 12, 104-115.—140 problem children at the Child Guidance Home of the Jewish Hospital in Cincinnati were the subjects. "Neither mental age, social age, nor intelligence quotient—social quotient relationships furnish a basis for prognosticating the age level of behavior which the problem child may present. More important in this connection is the determination of the status of the central nervous system because apparently on the integrity of the latter depends the degree to which the child can utilize his intellectual and social capacities."—R. E. Perl (Jewish Board of Guardians).

2930. Maxfield, K. E., & Fjeld, H. A. **The social maturity of the visually handicapped preschool child.** *Child Develpm.*, 1942, 13, 1-27.—77 Vineland Social Maturity Scale items were used and are listed

(according to age groups from 0 to 11 years). 101 visually handicapped children (below 7 years of age) served as subjects. They made lower average scores on the scale than normal seeing children of corresponding ages. Item analyses revealed that certain items were relatively more difficult, others relatively easier for partially seeing than for normal children, while still others showed little difference. In a detailed comparison of matched groups of partially seeing and blind children the former scored slightly higher. Tentative age norms for visually handicapped preschool children are given for 32 of the items. 17 case histories (not presented) showed agreement between behavior notes and trends indicated by the scale, as well as the influence of a number of factors on the Social Quotient. Summaries of evaluations of individual items (by age groups) are given, and a tentative revision of the scale for use with visually handicapped preschool children is presented.—C. N. Cofer (George Washington).

2931. Meltzer, H. **Sex differences in parental preference patterns.** *Character & Pers.*, 1941, 10, 114-128.—Some of the findings in this study are in accord with Freudian concepts, such as the following: the mother is more preferred by boys than by girls, and boys' reactions are more complex than girls'. But these and other preferences are functions of the division of labor between parents in our economic order rather than of universal complexes and fixations. Psychologists should neither shun Freudian concepts nor set up studies to disprove them but should attempt to discover the facts about them. The method used in this study, the single free association interview, is of clinical value in studying problems of family adjustments as well as of child guidance. 19 references.—M. O. Wilson (Oklahoma).

2932. Métraux, R. W. **Auditory memory span for speech sounds of speech defective children compared with normal children.** *J. Speech Disorders*, 1942, 7, 33-36.—Two matched groups of 34 children each, between the ages of 6 and 10 years, were tested. In addition, data from 66 unmatched speech defective children were available for study. Auditory memory span of speech defective children is slightly greater for vowels, and lower for consonants, than that of normal speaking children. "There can be no final interpretation made on these results because of the small number of cases used in the study, and because of the great variance in number in many of the correlation groupings."—C. V. Hudgins (Clarke School).

2933. Middlemore, M. P. **The nursing couple.** London: Hamish Hamilton Medical Books, 1941. Pp. xvii + 195. 7s. 6d.—[Abstracted review; original not seen.] The book "describes observations on the behavior during suckling of 46 infants

in the lying-in ward of a hospital; their differing modes of satisfaction and frustration; and how these were related to the behavior and attitude of the mother. The deleterious effect of anxiety and nervousness in the mother was particularly observed." No data as to the child's subsequent development were obtained. There are a number of comments in the book about the effects on fantasy life, such as: "If the mother bothered the child too much during unsatisfactory feeds . . . he remained passive and shrinking . . . I conclude that the feelings of the baby at these times would dispose him later to make fantasies of an attack during feeding."—N. R. Bartlett (Brown).

2934. Murphy, L. B. **Patterns of spontaneity and constraint in the use of projective materials by preschool children.** *Trans. N. Y. Acad. Sci.*, 1942, 4, 124-128.—This paper reports the effect of family experience on the degree of restraint or freedom of expression as revealed by projective play techniques. "Sequences and patterns of spontaneity and constraint may directly reflect contemporary areas of freedom and constraint in the family life; or they may reflect a distillation of sequences of experience through periods of years or shorter periods."—F. W. Finger (Virginia).

2935. Preston, R. C. **Children's reactions to a contemporary war situation.** *Child Developm. Monogr.*, 1942, No. 28. Pp. x + 96.—A comprehensive information test based upon prominent news about happenings, personalities, and technical, economic, and social aspects of warfare as it prevailed early in 1940, and including also a test of partisanship and attitudes, was administered to 581 children, aged 8-15 years. 100 children were also interviewed, and supplementary data were obtained through observation and interviews with teachers. Children tended to be quite well informed concerning the more dramatic aspects of the war but showed relatively little knowledge concerning the less showy but often more profound developments. Boys somewhat surpassed girls in information. Age and sex groups were decidedly more similar in attitudes and partisanship than in information. The correlation between attitudes and information scores was .14. Systematically indoctrinated children (e.g. children of Communists) were more stereotyped and restricted in explaining their partisanship than others. "A large proportion of children under 13 years appeared to lack a spontaneous attraction toward, preoccupation with, and capacity for mastering the intricacies involved in a war situation," perhaps because they were "precipitated too early into difficult abstract and complex concepts in connection with the social studies in the elementary school."—A. T. Jersild (Columbia).

[See also abstracts 2598, 2605, 2649, 2778, 2799, 2800, 2803, 2865, 2884.]

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